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UNIVERSITY OF ILLINOIS

INSTALLATION OF EDMUND JANES JAMES, PH. D., LL. D. AS PRESIDENT OF THE UNIVERSITY

PART I.

PROCEEDINGS OF THE NATIONAL CONFERENCE OF COLLEGE AND UNIVERSITY TRUSTEES

OCTOBER 17-19, 1905

EDITED BY E. J. TOWNSEND, PH. D.



URBANA, 1906

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PREFATORY NOTE

During the week in which Doctor Edmund J. James was formally installed as President of the University of Illinois, there was held at the University in connection with the ceremonies of installation a national conference of trustees of American colleges and universities. The following announcement of the conference was sent to the trustees of all the more prominent educational institutions of collegiate rank in the country:

**ANNOUNCEMENT OF THE NATIONAL CONFERENCE OF THE TRUSTEES OF
AMERICAN COLLEGES AND UNIVERSITIES TO BE HELD AT THE UNI-
VERSITY OF ILLINOIS, URBANA, ILLINOIS, BEGINNING TUESDAY,
OCTOBER 17TH, 1905, 2 P.M.**

A national conference of trustees of American colleges and universities will be held at the University of Illinois, Urbana, Illinois, beginning Tuesday, October 17, 1905. All trustees of such institutions and all persons who have served as trustees are cordially invited to attend.

The sessions will be held during the week in which Dr. Edmund J. James will be formally inaugurated as president of the University of Illinois. The member of the conference will be invited to attend the exercises connected with the inauguration. This will give the members of the conference an opportunity to meet representative men, presidents and professors, from many different institutions, who will be in attendance as delegates, and also to inspect the work of one of the larger of the state universities.

It is well known that the method of governing higher institutions of learning by boards of trustees, that is, bodies of non-experts,—laymen, so to speak, in the field of education,—is peculiarly American.

In England the old universities are self-governing bodies, controlled largely by the faculties; in France and Germany they are departments of the governments, and, so far as they are not directly under the control of the government, they are autonomous, that is, ruled by the faculties. In the United States alone we have felt it necessary to create a third organ, an independent, often self-renewing body of non-experts, in whose hands the entire legal control has usually been placed.

Many authorities regard this as a most satisfactory method; others find in it some of the most serious weaknesses of our American system of higher education; all believe that the problems connected with such a plan of control are far from being worked out satisfactorily.

This conference has been called for the purpose of discussing some

of the most important questions of college and university administration, involving the relations of trustees, presidents and faculties. Among the questions which will be discussed are the following:

1. What should be the real administrative body of a college or university, the faculty or the trustees?

Should the trustees limit their functions to selecting a faculty and then vest in the latter the actual administration, or should the board itself undertake to administrate the institution, either as a body or through its committees?

2. Should the president of an institution be the sole advisory authority to the board of trustees, or should the other administrative officers, or the various faculties, be consulted?

3. Should the faculty be authorized to nominate men to the board for vacancies, or should that be done by the president or by committees or by members of the board?

4. How should trustees be selected? (a) By coöptation? (b) By the Alumni? (c) By outside authority?

1. In case of private institutions, by the church or other body?

2. In case of state institutions,

(a) Appointed by the governor?

(b) Elected by the people?

(c) or *ex officio*, e. g., governor, superintendent of public instruction, etc.?

5. Should the trustees assume entire control of the financial administration, or should they allow the faculties to have a representation also, by allowing them to submit a budget either by departments or as a whole?

6. Should the trustees, if they reserve the financial authority, undertake to determine the budget in all its details, or should they simply distribute by departments and leave it to the individual departments to make the detailed distribution.

7. Should the trustees of all institutions, public and private alike, be required by law to file full financial statements with some public authority and publish the same?

8. Should the alumni have some formally recognized place in the scheme of government of the institution? If so, what?

9. Should the student body have formal recognition in the scheme of government by being privileged to appoint representatives to any disciplinary or administrative body?

10. Is it possible to devise uniform methods of bookkeeping and statistics, so as to make comparisons more valuable?

It will be seen that these are all vital questions, indicating difficulties which every board of trustees has to meet. It is believed that every university or college trustee will derive great aid in the

performance of his duties by attending this conference and exchanging views on these important topics.

Urbana, in which the University of Illinois is located, forms with its adjoining city, Champaign, a single community of about twenty thousand inhabitants. It is situated 128 miles due south of Chicago, at the junction of three great railway systems, the Illinois Central, the Chicago, Cincinnati, Cleveland and St. Louis (Big Four), and the Wabash railways, and is thus easy of access from every direction.

Persons desiring to attend this conference should notify the undersigned as soon as possible. Suggestions as to other desirable topics for discussion will be thankfully received. Address,

DAVID KINLEY,

Dean of the College of Literature and Arts, University of Illinois,
Urbana, Illinois.

In response to the call about 100 trustees and others in administrative positions assembled for the conference. This pamphlet contains a full account of the proceedings.

PROGRAM

FIRST SESSION: 3:30 P.M., *Tuesday, October 17*

Address of Welcome: Mr. S. A. Bullard, President of Board of Trustees, University of Illinois.

Address: The University Presidency: Hon. A. S. Draper, Commissioner of Education, State of New York.

Address: Closer Relations between the Trustees and Faculty: Mr. James P. Munroe, Trustee of Massachusetts Institute of Technology.

Discussion: Mrs. Norman Frederick Thompson, Trustee of Wellesley College.

SECOND SESSION: 9:00 A.M., *Thursday, October 19*

Address: The Academic Career: Professor Joseph Jastrow, President of the American Psychological Association.

Discussion:—

President J. W. Mauck, Hillsdale College.

President James H. Baker, University of Colorado.

Professor Richard Jones, Trustee of Iowa College.

President Brown Ayers, University of Tennessee.

Mr. S. A. Bullard, President Board of Trustees, University of Illinois.

Mr. James P. Munroe, Trustee of Mass. Inst. of Technology.

Mrs. Carrie T. Alexander, Trustee of University of Illinois.

Mrs. Norman Frederick Thompson, Trustee of Wellesley College.

Professor Joseph Jastrow.

Address: Questions Regarding College Administration: Dean Charles E. Bessey, Trustee of Doane College, (Presented by Professor S. A. Forbes, University of Illinois).

Discussion: Mr. Henry H. Hilton, Trustee of Dartmouth College.

THIRD SESSION: 3:00 P.M., *Thursday, October 19*

Address: State Supervision of Endowment Funds: Mr. J. P. Lippincott, Trustee of Illinois College.

Address: University Investments and Accounting: Mr. Wallace Heckman, Counsel and Business Manager of University of Chicago.

Address: Need of Business Methods in Our Universities: Mr. William S. Dyche, Business Manager of Northwestern University.

Discussion:—

Mr. Ernest Reckitt, C. P. A., Chicago.

Mr. J. E. Davidson, Trustee of Hillsdale College.

Mr. A. C. True, United States Department of Agriculture.

FOURTH SESSION: 8:00 P.M., *Thursday, October 19*

Address: The Selection of Trustees: Hon. Paul Jones, Ex-trustee of Ohio State University.

Discussion: Principal James E. Armstrong, Ex-trustee of University of Illinois.

Address: Secondary Administrative Positions in University Organizations: Eugene Davenport, Director of the Agricultural Experiment Station, University of Illinois.

Discussion: Dean David Kinley, University of Illinois.

Review of the Work of the Conference: Mr. S. A. Bullard, President of the Board of Trustees, University of Illinois.

FIRST SESSION

ADDRESS OF WELCOME

By HON. S. A. BULLARD, M. Arch.

President of the Board of Trustees, University of Illinois

It affords me great pleasure as President of the Board of Trustees of the University of Illinois, to welcome you as delegates and friends to this conference, to the University of Illinois, and to all the entertainments that will be given during the week; and we trust your stay here may be not only a benefit to you, but to all those people whom you represent in the different colleges throughout the country.

Such an assembly as this is unique in the history of the colleges of our country. The gathering together of people representing boards of trustees of the several colleges seems to me must result in great advantage. We shall be able to compare notes and to exchange ideas concerning the conduct of institutions of learning. The advantages to be derived from such an interchange of views, I am sure, will more than repay the cost.

This is a conference. Therefore, there will be no standing committees, so that any expression of opinion of this body will have to come through resolutions introduced by individual members of the conference. In seeking the views of this conference, upon any topic, it seems to me it would be very appropriate that resolutions expressing some definite idea should be presented, to the end that we may act upon them, and the work of the conference may be preserved.

The university trustee is peculiar to American institutions. He is selected in different ways in different institutions, and even in the same institution he is not always selected in the same manner. In our State the control of the University is placed in the hands of nine trustees, elected by the people as such, upon the same ticket as other officers of the State, together with the governor and the superintendent of public instruction, and another, who is elected to represent the agricultural people of the State as President of the State Agricultural Society. These twelve people constitute our board. Other institutions may have other and different ways of choosing their controlling boards,—such as appointment by some official, or body of individuals, election by alumni, or faculty, or by choice of the remaining members of the trustees themselves. The trust imposed upon the governing boards may vary in the different institutions. They do not all have the same duties and responsibilities, and in all these we may not be

able to make actual comparisons and draw helpful conclusions: but we may be given to see how the several boards do the work devolving upon them, and how they meet some of the perplexing questions which are constantly arising and so be enabled, ourselves, to see more clearly the pathway of duty as it dimly appears before us.

No one serving as a trustee, or at least a very few, receives a salary for such service. Most of us have business interests in addition to the work which we are doing as trustees. Therefore the work of the trustee is a gratuity. The man of business affairs brings with him to his office of trustee, his usual systematic business methods, and by his advice and counsel aids largely in conserving the financial interests of his institution. His relations with the business world give him also decided views of the way in which the college or university may best serve the world of business activity about him, and thus in one more way repay to society the money expended in educational work.

The duties of trustees of our colleges are responsible dutes, and, if such a gathering as this will inspire us to perform those duties more conscientiously, and by having the benefit of the experiences and suggestions of others we may have more wisdom with which to perform them, I shall feel that this conference has been a success.

THE UNIVERSITY PRESIDENCY

By HON. ANDREW S. DRAPER, LL.D.
Commissioner of Education, State of New York

[By permission of The Atlantic Monthly]

There are at least four features which distinguish university work in America and exercise a decisive influence upon the form of government in American universities.

The first grows out of the universal democracy of the country and the common ambitions of the people. Every one who shares in the spirit of the country wants to get to the top, and continually hears that he may, if he will seize his opportunities. He has no thought of following his father's work, unless, as is quite improbable, it is in line with his special ambitions. The need of the higher training for all kinds of work involving mental aptitude is now everywhere recognized. The secondary schools have become a part of the common school system, and every teacher in high school or academy leads his students very near to the point of thinking that they will lose their chance in life, and even be discredited, if they do not advance to college or university. The university life is now specially attractive to the young, and they want a share in the pleasure and enthusiasm of it. This brings to the universities great numbers who in other days never went to college, who in other lands would not go now. Many of these must be both led and pushed.

Then, the common thought about liberal education has changed. It is no longer only classical, culturing, disciplinary: it must prepare students not only for the multiplying professions, but for the multiplying industries. It trains one for *work*, but work which may distinguish him. Cultivated aimlessness is no longer the accepted ideal of American scholarship. Culture which is not the product of work either mental or manual, with some definite point to it, is held to be at second-hand, only skin-deep, and not to be taken seriously. It must not be said that mere strength and steadiness in holding down a job are the marks of an educated man. There must be native resourcefulness and versatility, sound training and serious study, discrimination in means and methods, and rational applications to real things in life, in ways that bring results of some distinct worth to the world. It makes little difference *what* one does, but he must do something. The all-important fact is not that real learning may now be found in all businesses,—though that is important,—but that one must do something of recognized value, to be held a scholar. It may be not only in letters, or science, or law, or medicine, or theology, but it may be also in administration, in planning and constructing, in mechanics, in agriculture, in banking, in public service, in anything else worth while.

If one's powers of observation, of investigation, of expression, and of accomplishment, lead him to do something of real concern, to do it completely and quite as well as, or better than, others can do it, and impel him to open up new vistas and methods of doing other things of larger moment, he has a better right to be held an educated man than he who incubates the unpotential and brings forth nothing. And not only have educational values changed, but educational instrumentalities have changed. Books and academic discussions have their part, but in many directions it is now a minor part. Things are taught and learned, new insight and the power to do are gained, through actual doing. And not only is the training through doing rather than through reading and talking, but the opportunity of selection extends to every subject and every study. It requires buildings and equipment and teachers never before within the means of an institution. It has revolutionized the scope, the possessions, the plans and methods, the offerings, and the outlook of the universities. While this is coming to be true in a measure in other countries, the unconventional freedom, the industrial aggressiveness, the unparalleled volume of money going into university operations in this country have given us the leadership of a New-World movement in higher education.

Again, university revenues come from men who have done things and want other things done. It is exclusively so in private institutions, and the people and representatives who vote appropriations to the state universities have no other thought. While few are so short-

sighted as to be opposed to a balanced and harmonious university evolution, still, money is provided more freely for the kind of instruction in which the providers are most interested. This, of course, gives shape and trend to the development. But it does more: it creates the need of teachers not heretofore adequately prepared or not prepared in adequate numbers. The vastness, the newness, and the unpreparedness of it all create the need of general oversight and close administration. Even more, when teachers are not supported by student fees, but are paid from the university treasury without reference to the number of students they teach, or very sharp discrimination about the quality of work they do, there is no automatic way of getting rid of teachers who do not teach or of investigators who do not produce. Some competent and protected authority must accomplish this and continually reinforce the teaching staff with virile men. The competition between institutions rather than between men, and the natural reluctance at deposing a teacher, are producing pathetic situations at different points in many American universities, and are likely to become the occasion of more weakness in our university system than has been widely realized.

Yet again, the sentiment of this country does not agree, and doubtless will never agree, that American universities shall stand for mere "scholarship" without reference to character, or that boys shall be allowed to go to the devil without hindrance, for the lack of university leadership, or to accommodate administrative cowardice or convenience. Students will have to be controlled and guided in this country, and American universities will have to have leaders who are leaders of morals as well as of learning, and who will stir the common sense, and use the common sentiment, through the authoritative word spoken in the crowd.

One may lament that our universities are not copied upon German or English models; that overwhelming numbers of students are going to them; that not all who go are serious students; that we are moving in new educational directions; that our professors are not made to live on fees; and that there is neither a care for superficial culture without much regard for true scholarship, nor a vaunting of mere scholarship without reference to moral character. The labor is lost. These things are so: they are right because they are so; because they are the outgrowth of the compounding of a great new nation in the world, and because they are the logical outworkings of a marvelous advance in the thinking of men who are free to do some thinking for themselves.

It is hardly worth while to be troubled because we cannot see the road beyond the turns that are ahead. There *is* a road beyond the turns,—or one will be made. President Pritchett of the Massachusetts Institute of Technology, in a recent address at the University of Michigan, published in the September *Atlantic*, discusses, without

answering, the question, "Shall the University become a business corporation?" Dr. Pritchett ordinarily does things exactly and completely. He can answer questions,—particularly when he asks them of himself. He did not answer this one because the answer is so obvious. He used his question to express a very common skepticism. Of course the university cannot become a business corporation, with a business corporation's ordinary implications. Such a corporation is without what is being called *spiritual aim*, is without moral methods. Universities are to unlock the truth and turn out the best and the greatest men and women; business corporations are mainly, if not exclusively to make money. If this is a harsh characterization, it can not be denied that it has been earned by the great business corporations with which the great universities must be compared if they are to be compared with any. A university cannot become such a corporation without ceasing to be a university. The distinguishing earmarks of an American university are its moral purpose, its scientific aim, its unselfish public service, its inspirations to all men in noble things, and its incorruptibility by commercialism. But that is no reason why sane and essential business methods should not be applied to the management of its business affairs. It is a business concern as well as a moral and intellectual instrumentality, and if business methods are not applied to its management it will break down. If they are not to be employed, the university, with its vast accumulations of materials and men, must be a mistake, or, worse yet, a wrong. It is neither a mistake nor a wrong, or it would not be here. It is neither an accident nor an impulse; it is a growth, the deliberate product of conditions, of means, and of thought. It is a great combination of material resources and moral forces essential to modern competitions, the needed inspiration of all factors in the population for large areas of territory, and its usefulness depends upon giving the management both moral sense and worldly knowledge.

The responsible authorities in the management of a university are the trustees, the president, and the faculty. Legal enactments settle in some measure the exact functions of each, but common knowledge of the kinds of government which succeed when much property and many interests are involved, as well as the imperative necessities of the particular situation, have gone much further to establish the governmental procedure in the university. While the immediate purpose is to exploit the functions and powers of the university president, some reference necessarily brief must be made to the prerogatives and duties of the trustees and faculty.

A vital principle in all government involving many cares and interests is tersely expressed in the statement that bodies legislate and individuals execute. It goes without saying that legislation must be by a body which is both morally responsible and legally competent,

and common observation proves to us that it must concern an actual situation, to be of any real worth. If it involves special knowledge, it must be by men who have the knowledge or who will respect the opinions of others who have it.

Trustees, as the representatives of the founders or donors, or of the state, are practically, if not altogether, unknown to foreign universities. Those universities are managed directly by the government, or by the faculties, or by both. The introduction of trustee management into American universities has resulted necessarily from their more democratic character, from their different manner of support, from their independence of government, and from the difference between the political systems and popular purposes in the New World and the Old. With the early development of American universities it was obvious enough that they could not be left to the management of political officers; that they must be managed without partisanship and governed by law rather than supervised by legislatures; and as they have taken shape, it has been equally clear that the appointment of teachers and the assignment of resources to departments could not be left to the faculties. The special circumstances of the universities, and the practically uniform plan of corporate management in America, developed the board of trustees in our universities, with functions and powers subordinate to and consistent with, and exercised in a similar manner with, those which are held by the sovereign legislative authority over all corporations. Trustees stand for the legislature so far as the law permits.

The trustees of a university are charged by law, either statutory or judge-made, or by widely acknowledged usage, with that general oversight and that legislative direction which will assure the true execution of a trust. They are to secure revenues and control expenditures. They are to prevent waste and assure results. They are never to forget that they represent the people who created and who maintain the university. They are not to represent these people as a tombstone might,—but as living men may. They are to do the things their principals would assuredly do if in their places, to enlarge the advantage to the *cestui que trust*. This is a heavy burden. It must be assumed that it is given to picked men who are specially able to bear it; who would not give their time to it for mere money compensation, but are happy in doing it for the sake of promoting the best and noblest things.

The trustees do not live upon the campus, and they are not assumed to be professional educationalists. Their judgment is likely to be quite as good as to the relations of the work to the public interests, and as to what the institution should do to fulfill its mission, as that of any expert would be. To get done what they want done, they must enact directions and appoint competent agents. The individual trustee has no power of supervision or direction not given to

him by the recorded action of the board. What they do is to be done *in session*, after the modification of individual opinions through joint and formal discussion. It must be reduced to exact form and stand in a permanent record. Trustees make a mess of it when they usurp executive functions, and they sow dragons' teeth when they intrigue with a teacher or hunt a job for a patriot who thinks he is in need of it. They are bound to regard expert opinion and to appoint agents who can render a more expert service than any others who can be procured. They are to keep the experts sane, on the earth, in touch with the world, as it were. They are to sustain agents and help them to succeed, and they are to remove agents who are not successful. From a point of view remote enough and high enough, they are to inspect the whole field. They are bound to be familiar with all that the institution is doing. They are to be alert in keeping the whole organization free from whatever may corrupt, and up to the very top notch of efficient public service. There is too much money involved to permit of idle experimentation, too high interests at stake to allow of vacillation and uncertainty. Under a responsibility that is unceasing and unrelenting they must learn the truth and never hesitate to act upon it. And they must find their abundant reward, not in any material return to themselves, but in the splendid fact that the great aggregation of land and structure and equipment, of great teachers and aspiring students, of sacred memories and precious hopes and potential possibilities, is doing the work of God and man in the most perfect way and in the largest measure which their knowledge and experience, their entire freedom, and their combined wisdom and forcefulness can devise.

The business of university faculties is teaching. It is not legislation and it is not administration,—certainly not beyond the absolute necessities. There is just complaint because the necessities of administration take much time from teaching. It lessens the most expert and essential work which the world is doing. It seldom enlarges opportunity or enhances reputation. It is true that teachers have great fun legislating, but it is not quite certain that, outside of their specialties, they will ever come to conclusions, or that if they do, their conclusions will stand. The main advantage of it is the relaxation and intellectual dissipation they get out of it. That is great. And, in a way, it may be as necessary as it is great. Of course teachers could not endure it if they were always to conduct themselves out of the classroom as most of them seem to think they are obliged to do in it. Perhaps others would also have difficulty in enduring it. They are given to disorderliness and argumentation beyond any other class who stand so thoroughly for doing things in regular order. It is not strange. It is the inevitable reaction,—what some of them would call the *psychological antithesis*, I suppose. Nor is it to be repressed

or regretted, for it adds to the effectiveness and attractiveness of the most effective and attractive people in the world. All this is often particularly true of the past masters in the art. No wonder that Professor North, who taught Greek for sixty years at Hamilton College,—“Old Greek,” as many generations of students fondly called him,—wrote in his diary that it would have to be cut in the granite of his tombstone that he “died of faculty meetings,” for he was sure that some day he would drop off before one would come to an end.

But the needs of the profession ought to be met by directing the surplus of physical and intellectual energy into really useful and potential channels, such as sports, or battling over academic questions with the doughty warriors of other universities.

Speaking seriously, university policies are not to be settled by a majority vote. They are to be determined by expert opinion. The very fact of extreme expertness in one direction is as likely not to imply lack of it in other directions. Experts are no more successful than other people in settling things outside of their zone of expertness. Within that they are to have their own way so long as they sustain themselves and the money holds out. But the resources are not to be equally divided for mere convenience. University rivalries are not to be adjusted by *treaties* between the rivals. More of university success depends upon keeping unimportant things from being done in a mistaken way than upon developing useful policies and pursuing them in the correct way. Men and work are to be weighed, not counted. Department experts are to determine department policies, college experts college policies, and university experts university policies.

What the President of the United States is to the Federal Congress, the president of the university is to the board of trustees. It has not long been so, because American universities are recent creations. When colleges were small, when the care of their property was no task, when all of a college were of one sect, and theology was the main if not the only purpose, when there was but one course of study and the instruction was bookish and catechetical, administration was no problem at all. There was nothing to put a strain on the ship. Even though there was no specific responsibility and no delegation of special functions, with immediate accountability, possessions did not go to waste, frauds did not creep in, and injustice and paralysis did not ensue. It may easily be so now in the smaller colleges; it cannot be so in the great universities. The attendance of thousands of students, the enlargement of wealth and of the number of students who go to college without any very definite aim, the admission of women, the more luxurious and complex life, the greater need of just and forceful guidance of students, the multiplication of departments, the substitution of the laboratory for the book, the new and numberless pro-

cesses, the care of millions of property and the handling of very large amounts of money, and the continual and complete meeting of all the responsibilities which this great aggregation of materials and of moral and industrial powers owes to the public, have slowly, but logically and as a matter of course, developed the modern university presidency. It is the centralized and responsible headship of a balanced administrative organization, with specialized functions running out to all of the great innumerable cares and activities of the great institution. It is the essential office which holds the right of leadership, which has the responsibility of initiative, which is chargeable with full information and held to be endowed with sound discretion, which may act decisively and immediately to conserve every interest and promote every purpose for which the university was established.

It may be well to specify and illustrate. Conditions are not wholly ideal in a university. Men and women not altogether ripe for translation have to be dealt with. Real conditions, often unprecedented, have to be met. Not only effectiveness within, but decent and helpful relations with neighbors, constituents, and the world, are to be assured. Some authority must be able to do things at once, and some word must often be spoken to or for the university community. When spoken, it must be a free word, uttered out of an ample right to speak.

An America university may be possessed of property worth from three to fifty millions of dollars. This is in lands and buildings and appliances and securities. These things may be legislated about, but that alone is not caring for them. To keep them from spoilation and to make the most of them, there must be expert care through a competent department, but in harmonious relations with an ever-present power which has the right and responsibility of declaring and doing things.

The very life of the institution depends upon eliminating weak and unproductive tachers and reinforcing the teaching body with the very best in the world. Unless there is a scientific aggressiveness in the search of new knowledge, some very serious claims must be abandoned and some attitudes completely changed. No board ever got rid of a teacher or an investigator—no matter how weak or absurd—except for immorality known to the board and likely to become known to the public. The reason why a board cannot deal with such a matter is the lack of individual confidence about what to do, and of individual responsibility for doing either something or nothing. But, with three or four hundred in the faculty, the need of attention to is this vital matter always present and urgent. No board knows where new men of first quality are to be found; no board can conduct the negotiations for them or fit them into an harmonious and effective whole. The man who is fitted for this great burden and who puts his conscience up against his responsibility can hardly be expected to tolerate the

opposition of an unsubstantial sentiment which would protect a teacher at all hazards, or the more subtle combination of selfish influences which puts personal over and above public interests when the upbuilding of a university is the task in hand.

Not only must the teaching staff be developed,—the work must be organized. It must develop a following, connect with the circumstances and purposes of a constituency, and lead as well as it can up to the peaks of knowledge. It is not necessary that all universities cover the same lines of work or have the same standards. It is not imperative that all have the same courses or courses of the same length. It *is* necessary that all serve and uplift their people. But how? A master of literature will say through classical training and literary style; a scientist will say through laboratories; a political economist will say through history and figures and logic; an engineer will say through roads and bridges and knowledge of materials, and the generation and transmission of power and skill at construction; and a professional man will say through building up professional schools, providing no mistake be made about the particular kind of school. Some one of wide experience, having a scholar's training and sympathies, possessed of a judicial temperament and of decision as well, must have the responsibility and the initiative of distributing resources justly as between the multifarious interests, and binding them all into an harmonious and effective whole.

Difficult as that is, it is not the heaviest burden of university leadership. Ideals must be upheld and made attractive: they must be sane ideals which appeal to real men,—and not only to old men, but to young men. There must be no mistaking of dyspepsia for principle, no assumption that character grows only when powers fail; but a rational philosophy of life by which men may live as well as die.

Nor is this all. There must be forehandedness. Some one must be charged with the responsibility of peering into the future and leading forward. New and yet more difficult roads must be broken out. Some one in position to do it must be active in initiating things. He must see what will go,—and, quite as clearly, what will not go. Subtle but fallacious logic—and a vast deal of it—must be resisted, greed combated, conceits punctured, resources augmented, influences enlarged, forces marshaled for practical undertakings, and the whole enterprise made to give a steadily increasing service to the industrial, professional, political, and moral interests of a whole people.

Then there is the management and guidance of students. One may as well complain because this country is a democracy as repine because the sons and daughters of the masses want to go to college. There is no ground for regret in the fact that our universities are not just like some universities over the seas. We have much to learn from them and we are likely to learn much. We have quite as much to

avoid. It seems too much to expect to work un-American ideas, and perhaps loose habits, out of American students who study in Europe, when they come home. Our universities are different from the universities in other countries, because of our circumstances and political history, because of our spirit and outlook. That is reason enough why they should be different.

It is useless to question whether all who come to the higher educational institutions are wise in coming. They *are* coming. The work will have to be broad enough and adaptable enough to meet their needs. Nor is it worth while to bewail the fact that not all who come are serious students. Their purposes are good enough and serious enough according to their lights. Their preparation is what has been exacted by the university and provided by the high school. Some of them have to be pulled up and pushed along, but the process often brings out most unexpected results. Students are not all angels, but every student is worth being helped by an angel up to an angel's place. The task is upon the people who undertake to manage universities.

Students have to be directed in companies, but dealt with individually. They may be directed by a rule; when they break the rule they must be dealt with by a man. It must be a man who can stand pat for all that ought to inhere in a university; but such a man will get on best if, in addition to being able to stand pat, he is able to like boys; he is likely to get on better still if he was once a rather lively boy himself; or, at least, if he is a kind of man for whom a boy with some ginger in him can find it in his heart to have, not only considerable respect, but some regard and admiration.

This is not saying that college students are to be treated like children. It is not implied that they are to be excused for being ruffians. Quite the contrary is true. They are to be held exactly responsible to law and rule and all well-known standards of decent living. There must be less viciousness in the life of American universities, or they must and ought to suffer seriously for it. It is to be resented and punished far more forcefully than it has been. Students who get into this kind of a thing and persist in staying in are to be punished, even to the point of being thrust out—and even though it changes the course of their lives and breaks the hearts of fathers and mothers. The good of all is the overwhelming consideration. A university is to be a university, and not something else. Of all institutions, it is to stand for character and ideals. The universities are not to be closed and all youth denied their advantages because a few abuse their privileges. The punishment of the bad, if there are any bad, is the protection of all the rest. It is an essential safeguard to safe administration and the wholesome living of the crowd. But is it not better to go farther and hold all the boys we can from going to the dogs by keeping in sympathy and touch

with them, than it is to encourage them into deviltry through the coldness or the downright dullness or nervelessness or cowardliness of an administration?

The logic of the situation puts this burden upon the president, or upon one working with singleness of purpose with him. Perhaps the president cannot deal with all directly, but that is no reason why he should not go as far as he may. He must assume responsibility for management, giving the right turn and inspiration to it. It is essentially an executive function. The sun may as well avail himself of the help of a cloud to save his face when a board of trustees begins to make preachments filled with benevolent advice to a body of students; and even the man in the moon may be excused if he shuts one eye in contemplation at the spectacle of a university senate of many members undertaking to deal with a college boy in a scrape.

So much in reference to routine. The president who only follows routine, of course falls short. He is to construct as well as to administer. He must initiate measures which will result in larger facilities, in added offerings and enterprises, in searching out new knowledge, in the wider application of principles to work, and not only in the usual, but in the better training of men and women for distinct usefulness in life. He is not only to see that plans are within the limits of revenues, that the physical condition of the plant improves, that everything is clean and attractive, that the faculty is scientifically productive, that the instruction is exact and the spirit true; but he is to take the steps which will keep the whole organization moving ahead. He must adopt and promote and give full credit for movements initiated by others when their propositions are safe and practical,—but he must also be alert in stopping movements which will not go.

Perhaps more important than all, the president is to declare from time to time the best university opinion concerning popular movements and the serious interests of the state. He must connect the university with the life of the multitude, and exert its influence for the quickening and guidance of that public opinion which, as Talleyrand said, is more powerful than all the monarchs who ever lived or all the laws which were ever declared.

The unity and security of a university can be assured only thorough accountability to a central office. While every one is to have freedom to do in his own way the thing he is set to do, so long as his way proves to be a good way, the harmony of the whole depends upon the parts fitting together and upon definiteness of responsibility and frequency of accountability. No self-respecting man is going to administer a great office, or an office responsible for great results, and have any doubt about possessing the powers necessary or incident to the performance of his work. He will have enough to think of without having any doubt upon that subject. There need be no fear of

his being too much inflated with power. There will be enough to take the conceits out of him and keep him upon the earth. If he cannot exercise the powers of his great office, and yet keep steady and sane, there is no hope for him and he will speedily come to official ruin. It is not a matter of uplifting or of inflating a man; but of getting a man who can meet the demands of a great situation.

One fit to be trusted with large powers does not boast of them, and he does not need to exercise them very often. He will not go swaggering about, as the beadle does in Dickens's story, always pounding with his staff and proclaiming that the supreme occasion has now come for which he was created a parochial beadle. If large powers are overused or abused, the man who does it comes to an early official end. The fact of the presence of such powers makes the occasions for their exercise less frequent than they otherwise would be. There is, happily, a higher law in administration, as in everything else, and it both supports and limits the use of means to the accomplishing of ends.

Distinct and decisive authority in both the legislative and executive branches of university government is vital to peace and productivity. Nothing is so disheartening as chaotic conditions without law and leadership. There is small danger from autocrats in America or tyrants in American universities. There is more danger from mistaken reasoning about the means and methods by which the sentiment of a democratic people may have its expression and their wishes have result. Decisive executive authority is not at all inconsistent—it is thoroughly consistent—with democracy in government and freedom in universities. Democracies are as much entitled as any other form of government to have their purposes executed and get things done. Objections to this are sometimes offered, and then, of course, they are placed upon public grounds, but in fact they rest upon personal considerations. The men who see dangers in leadership, and in the supports which aid leadership, are the men who find it in the way of their peculiar views or personal ambitions; and rather singularly they are also the men who, having any measure of independent control themselves, bloom into as sizable specimens of the species martinet as can develop in purely democratic conditions.

Of course, no one can realize the hopes which center in a university presidency, without being able to work harmoniously with others. There must be a true deference to the opinions of many, and scrupulous recognition of the just, though unexpressed, claims of all. But we must never forget that administrative freedom is quite as inviolable as any other freedom, even in a university. The president must mark out his official course for himself, and bear the responsibility of it without cavil. He must expect to suffer criticism and opposition, even contumely. He cannot expect that the work he has to do will

make everyone happy. It will discomfit many. In one way or another they will give him all the trouble they can. The protests will be loudest because of the very acts for which his office has been developed. But he may comfort himself with the reflection that if the job were not so heavy there would be a cheaper man to manage it, and that the extent of the opposition is often the measure of real presidential business that is being performed. In any event, his only hope is in success, and he cannot go around the duty which confronts him without inevitable failure. Conditions may easily make a mere compromiser of him. If they do, the waves will speedily close over his official remains forever. Some choice and magnanimous spirits will help him; but he need entertain no doubt that there will be plenty more on every side to try out the stuff that is in him, and that they will diligently attend to the trying-out process until enough occurs to convince them that his wisdom, his rational conception of his task, his love of justice and sense of humor, his constructive planning, his independence, and his fearlessness, are sufficient to ignore little people and prove him worthy of as great an opportunity for usefulness and honor as ever comes to any man.

All this calls for a rare man. He ought, in the first place, to be reasonably at peace with mankind and in love with youth. He must have the gift of organizing and the qualities of leadership. He ought to have been trained in the universities, not only for the sake of his own scholarship, but that he may be wholly at home in their routine and imbued with their purposes. He must be moved by public spirit as distinguished from university routine or mere scholarly purpose. He must be a scholar,—but not necessarily in literature or science or moral philosophy. It is quite as well if it is in law, or engineering, or political history. He must be sympathetic with all learning. He can no longer hope to be a scholar in every study. He can hardly hope to administer such a trust or fill such a post without some knowledge and considerable aptitude for law. His sense of justice must be keen, his power of discrimination quick, his judgment of men and women accurate; his patience and politeness must give no sign of tiring, and the strength of his purpose to accomplish what needs to be done must endure to the very end. Yet he must determine differences and decide things. He must have the power of expression, as well as the more substantial attainments. Beyond possessing sense, training, outlook, experience, resistive power, decision and aggressiveness, he ought to be a forceful and graceful writer and at least an acceptable public speaker. In a word, the president of an American university is bound to be not only one of the most profound scholars, but quite as much one of the very great, all-around men of his generation.

CLOSER RELATIONS BETWEEN TRUSTEES AND FACULTY

By JAMES P. MUNROE, B. S.
Trustee of Massachusetts Institute of Technology

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I venture to speak upon the topic: "Closer Relations between Trustees and Faculty" because I am in this respect hermaphroditic. I have seen service upon both college bodies, and, moreover, have studied certain problems of public school administration which present many points of analogy. I speak, however, with only that half-knowledge which we of the east, unfamiliar with state-supported universities, bring to the important questions of this conference.

It is a common cry that teachers—whether in colleges or in schools—are underpaid; and the complaint (especially if one has been a school official) seems amply justified. The imperative need of our American college faculties, however, is not higher salaries; it is larger professional authority and more genuine freedom. Those attained, the wage question will take care of itself. It is true that teaching offers no such money prizes as does law or medicine; nevertheless, the average professor or schoolmaster is in many ways better situated than the average lawyer or physician. Despite this patent fact, the number of youth who deliberately prepare themselves to be teachers, by years of serious study, is comparatively small. Young men of power and ambition scorn what should be reckoned the noblest of professions, not because that profession condemns them to poverty, but because it dooms them to a sort of servitude. The American lawyer or physician is subject only to the judgment of his peers—that is, to the well-established code of his profession. The American teacher, on the contrary, especially in the public schools, is not only subject to—he is often wholly at the mercy of unsympathetic laymen.

This condition is inherent in the American system of education, and neither can nor should be wholly abrogated. The teacher serves the public (for even an *endowed* college is a public institution) and must rest, therefore, under some of a servant's disabilities. Yet, without impairing the proper powers of school or college trustees, it is possible, I believe, to give teachers—or rather to restore to them—so much of authority, dignity and independence as shall raise teaching to the professional status of the law—to a position, that is, where it will commend itself to the most ambitious and best-trained youth.

The medieval universities, as you know, were preeminently nurseries and citadels of intellectual freedom and political democracy. They were "essentially federated republics, the government of which pertained either to the whole body of the masters * * * or to the whole body of the students." Moreover, "what slight subordination

did exist, was in the beginning, to the ecclesiastical and, later, to the civil power." The American universities, also, from the frontier college of Harvard, in 1636, to the latest frontier (if there now is any such place) college of the plains—have been strongholds of intellectual freedom; but in their administration they have been profoundly subordinate, in the early days to the ecclesiastical, and later—directly or indirectly—to the civil power.

This subordination, under the stress of circumstances, has progressed until, as President Pritchett points out in a recent admirable address, the American university has become an autocracy, wholly foreign in spirit and plan to our political ideals and little short of amazing to those models of thoroughgoing democracy, the German universities. And this absolutism of the American university is not, as in the days of the scholastics, an autocracy of teachers and scholars; it is an autocracy of ecclesiastical or lay trustees. Whence has arisen this astonishing inversion? Why does the very fountain of our higher life present this paradox? Mainly, I think, because the European universities grew from within, while those of this country have been established from without. The old theocracy of New England, the younger democracies of her splendid daughters, created colleges to fit youth for service in church or commonwealth, and they placed over them men of notable authority. In the east, the hands of both church and state have been largely withdrawn; but in their place have appeared the dead or living hands of donors demanding that their gifts be safeguarded by stable and substantially irremovable trustees. College and public school funds are no less sacred than they are colossal; and those who administer them assume high legal as well as moral responsibility. But this large liability has been more than balanced by the gift of almost absolute powers—powers surpassing, perhaps, those of any other bodies. I do not know how it is here; but in Massachusetts the school boards are virtually despotic, far transcending in authority those sturdy democrats, their parent town meetings.

Excepting those strictly denominational, the balance of the extraordinary legal powers given to college trustees has gradually passed from the hands of the clergy into those of laymen chosen, as a rule, for their standing as financiers rather than as educators. From many aspects this has been a salutary change; but there has followed from it one signal disadvantage—that of putting the trustees more and more out of touch with the faculties whose members they appoint. Although the reverend gentlemen of those antique college boards could scarcely have distinguished a government bond from a wildcat stock, they were usually scholars by inclination and teachers by profession, and their relations with their faculties were close and sympathetic; while the modern financier who, by skillful investing, secures

every possible penny of income for his college, generally finds its educational problems quite outside his range, and sees, therefore, less and less occasion for meeting, or even knowing, that faculty over which, legally, his power is of life and death.

This change in personnel, however, is not alone responsible for the progressive alienation between trustees and faculty. That estrangement has come about, no less, through the rapid growth of college curriculums and in college attendance. When educational institutions were small and their courses of study undifferentiated, it was possible for trustees, even though not trained as teachers, to acquire an admirable education (so far as concerned their own college) through intimate relations with the faculty and personal supervision of their work. But with the enormous development in numbers and complexity, this old-fashioned contact between trustees and teachers has become impossible, and, at best, a trustee can now make himself familiar with only that department of the university which it is his duty (more honored in the breach than in the observance) to inspect. Therefore, the modern trustee has gradually withdrawn from the teaching side of the college to fix his attention upon those questions of revenue, housing and legislation which have multiplied even faster than the undergraduates.

But here again the size and complexity of the problem are appalling to men already overweighted with other responsibilities. These material questions, however, must be met and settled just as those on the educational side must be faced and solved. And both business and political experience have taught men of the world that the quickest and least troublesome way to solve administrative problems is to give as free a hand as possible to some man with brains, with tact, with power of initiative, of leadership, and of persuasion—with, in short, those peculiar abilities which distinguish the generals of our intricate twentieth century enterprises.

Hence has arisen the modern college president—a being as different from the awe-inspiring clergymen of the eighteenth century or from such men as Joshua Quincy (who was given the presidency of Harvard as a sort of haven for his declining years) as it is possible to imagine. The modern executives have had thrust upon them powers which give to their decrees the finality of an imperial ukase. They have assumed such sway, not from love of dominion, but because their task is so enormous that nothing short of practically plenary powers would permit of its being done at all. And it should be said to their honor that they have met the demands upon them as organizers and administrators so ably that, today, the leaders of the country are not, as formerly, the great statesmen and clergymen; they are these modern Cæsars—the heads of our principal colleges and universities.

These modern presidents have their cabinets in the board of

trustees (if that board be small) or in an executive committee selected from it if the board be large; they have their staff in the several administrative officers, such as deans and registrars; they have their field officers in the heads of departments or courses; and the work of the great machine, through committees, sub-committees, labor-saving devices and automatic methods of reporting, is as smooth-running (and sometimes, I fear, almost as impersonal) as a well-developed mercantile establishment. We have here a conspicuous example of the current tendency toward one-man power, towards that concentration of authority which makes, of course, for ease, rapidity and sureness of administration; but which, in politics, undermines manhood; in industrialism, destroys initiative; and in education tends to defeat the very object of teaching, which should be to develop and to make the most of every man's individuality. If the goal of a college were the giving of mere instruction, nothing could be better than the present system of administration; but colleges should be fountains of true education, and the best part of education comes through the personal influence of the older governors and teachers upon adolescent, and therefore highly impressionable, youth.

Most modern colleges have expensive and excellent material plants utilized substantially to their full capacity. They possess, also, admirable executives who, as I have said, are used away beyond their limits of endurance. But those colleges have also other educational forces which are not availed of, in my opinion, to anything like their normal maximum. Those less used forces are: (1) The personal influence, as teachers and men (not as mere administrators) of the leaders of the faculty—an influence which should be exerted upon both students and trustees; (2) the personal influence, as men of power and broad human experience (not as mere money-holders) of the trustees—an influence which should extend to students as well as faculty; and (3) the perennial and unselfish loyalty of the alumni, together with the unique experience given to those graduates in gauging their collegiate training by the tests of life. The third force is beyond the scope of the present paper; but let it not be inferred, therefore, that I regard it as any less potent than the other two. Indeed, in the last analysis, the moral as well as the financial strength of a college must come from its own sons.

As has already been suggested, the complexity and autocracy of the American university have converted the strongest men of the faculty—the men, therefore, whose personal influence upon the students would be of the highest value—into subordinate administrators harassed with details of department maintenance and committee attendance. As a necessary result, the teaching is put largely into the hands of recently graduated youth, zealous but not always wise, untrained in the science and art of teaching, and quite incapable,

of course, of giving to their classes the inspiration which comes from contact with men of wide experience. This throws the severest strain of the college upon the weakest part; and from it arises much of our educational ineffectiveness. Mere information, lesson-hearing, examinations, become paramount; scholarship and character are well-nigh forgotten, being impossible to register by even the most elaborate machinery.

The trustees, on the other hand—excepting those who constitute the president's cabinet—find less and less opportunity for usefulness in a machine so elaborate that any incursion into it, by those unfamiliar, may do infinite harm. Therefore most of them drift into the belief that their trust is discharged by attendance upon stated meetings and by, perhaps, an annual visit to that department which, nominally, is their especial care. Yet the personal influence upon the students of men like college trustees would be second only, in educational value, to that of the leading members of the faculty. I am not prepared to suggest any plan by which the trustees can be brought into direct personal relations with the students; but I firmly believe that such a plan could be devised; and I know that nothing so vivifies a man of middle life and of large responsibilities, nothing so clears his brain and rejuvenates his heart, as comradeship with bubbling and eager undergraduates.

Whether or not trustees can broaden their powers and sweeten their responsibilities by thus meeting their students directly, it is clear that they can influence them indirectly by establishing closer relations with those young men's teachers. For their pupils' sakes and for their own advantage, the professors need the stimulus and the breadth of view which they would get from looking at the world through the eyes of such a man of affairs as the usual trustee; those trustees, on the other hand, need the insight into true education and into the difficulties of training youth which they would secure from intimate contact with the members of their faculty. The money conservatism of the trustee, hesitating to grant funds for new enterprises, needs to be enlightened by the vision which the teacher has of the demands and possibilities of higher education. *Per contra*, the academic conservatism of the scholar needs to be quickened by the hard world-experience of a man of more varied responsibilities. That purblind vision of the "practical" man which exaggerates material success requires enlightenment through the opposite, but no less purblind, vision of the scholar which magnifies intellectual achievement. Each point of view is essential to the ends of true education, and unless each in authority can see and understand the other's outlook, the university will suffer and its youth will be defrauded of some of the best things in college.

At present—except for certain perfunctory visiting—almost the

sole point of contact between trustees and faculty is their common sovereign, the president, who, as I have tried to show, has administrative duties and responsibilities beyond normal powers. Moreover, however conscientious he may be, his personal equation cannot but enter into his interpretations—so to speak—between two bodies of which he alone is a common factor. It is essential to his leadership that he should have large powers over the teaching staff, but the opinions of the most perfect of administrators as to the individuals under his benevolent despotism should have the salutary check of others' close and unbiased observations.

In order, therefore, that there may be many instead of only one channel of understanding between trustees and faculty (as well as for the more subtle reasons suggested earlier), I would advocate most earnestly the creation in every board of trustees of a new standing committee. This committee should be most carefully chosen, and its duty should be to confer, at stated and frequent intervals, with a like standing committee of the faculty, selected freely by that body itself. And I would advise, further, that this conference committee be distinct, if possible, from that executive committee which I have called the president's cabinet, and that no legislation of any consequence should be passed by the executive committee or by the trustees as a whole without the concurrence of this joint committee. And—at least so far as relates to questions having any educational bearing—I would have it understood that the joint committee should *not* concur until the proposed action had been submitted to the faculty as a whole, had been debated, if so desired, before the standing committee and the executive committee sitting in joint session, and had been approved by at least a majority of the teaching staff.

Such a general plan as this (the details of which, needless to say, would differ with each college) could not fail, it seems to me, to increase the educational efficiency of a college to an extraordinary degree by coördinating the views of those without and those within the daily routine of teaching; by establishing a clear understanding, in each body, of the other's problems; by relieving the executive of a substantial portion of his crushing load, through increasing the legislative and administrative responsibility of the faculty; and, not least, by making that faculty—without adding to its legal powers—a body coördinate with, instead of subordinate to, the board of trustees. Unless American college teachers can be assured by some change as this that they are no longer to be looked upon as mere employees paid to do the bidding of men who, however courteous or however eminent, have not the faculty's professional knowledge of the complicated problems of education, our universities will suffer increasingly from a dearth of strong men and teaching will remain outside the pale of really learned professions. As I said in the beginning, the

problem is *not* one of wages; for no university can ever become rich enough to buy the independence of any man who is really worth the purchasing.

This plan of coöperation would not, however, except to a limited degree, bring the trustees as men into close contact with the faculty as men. And the plan which I offer towards that second aim is put forward with much greater diffidence. The scheme of a joint standing committee would be productive, I feel certain, of most happy results; but of my minor proposition I am not so sure. This second plan is to make every member of the board of trustees an administrative officer in that branch of the college work (so far as possible) which is most congenial to him, giving him no special individual powers over his assigned department, but increasing his responsibilities by making him—together with one or more of his colleagues—the direct and responsible channel of information between that department and the whole board of trustees. It is already customary in most colleges to create visiting committees with the duty of presenting annual reports; my suggestion would make substance out of what is now little more than shadow, by having it formally understood that in all matters relating to his department the trustee would be looked to for reliable information and responsible advice.

Difficulties, of course, stand thick in the way of such a project. Among them are the unwillingness of already busy trustees to accept further responsibilities, the danger of personal friction between the trustee and the department head, and the natural fear on the part of the teacher that "administration" might spell itself to the trustee as mere officiousness. It seems to me, however, that a short acquaintance with the minutiae of a college department would show the trustee that the professor's as well as his own time is far too valuable to be given to details of administration, and that college funds could in no way be made more productive than by giving the heads of departments such clerks and underlings as would release them from much killing drudgery. There is no greater extravagance than to permit an expensively trained man to do ten-dollar-a-week work. And that same short acquaintance would, I believe, so interest the trustee and so increase his respect for what is being done and what is still to do, that officiousness or meddling would become impossible.

These two plans, if found practicable and if developed in a spirit of enthusiasm, would lead to many other points of helpful contact between trustees and faculty and would discover, I think, unsuspected avenues of mutual help. And by these or some like methods trustees and faculties must be brought more closely together unless we wish to see the growing alienation of the administrative and teaching staffs develop into a real and fatal breach. Separation involves mutual misunderstanding and that, even among educated men, leads

as in industrial enterprsies, to arrogance on the part of the employer, to suspicion and dislike on the side of the employed. If coöperation seems imperative—as I think it does—to the solution of the problems of industrialism, how much more necessary is it if we are to solve the educational riddle. Coöperation would teach the trustees the antipodal difference between the problems of a university and those of a business corporation, and, at the same time, would show the faculty the importance of business methods and thorough organization. Coöperation would get things done without compelling our universities to take refuge in an autocracy which, harmful in itself, is breeding a race of youth who scorn the slow methods of democracy. It would develop trustees who actually, instead of fictitiously, comprehend their trust; it would unite faculties which, under the strain of departmental complexity, are fast disintegrating; it would double the educational efficiency of our colleges; and, most important of all it would make our universities, as they ought to be, supreme preservers instead of conspicuous destroyers, of that genuine spirit of democracy which, more than schools, more than churches, more than any other human agency, has uplifted mankind and builded civilization.

DISCUSSION

By MRS. NORMAN FREDERICK THOMPSON, A. B.
Trustee of Wellesley College

In our American politics, there is at least one doctrine which is generally accepted, that known as the "Monroe Doctrine;" and now it would seem to me, as doubtless to you all, that the speaker, Mr. Munroe, who has just finished, has enunciated an equally to be accepted Munroe doctrine in academic politics. Certainly the ideal he has formulated of a closer union between trustees and faculty is one always to be held in mind, always to be striven for and perhaps attained, *when* we shall have developed a leisure class among our men of culture, with lives consecrated to social service.

Just as our American life is now organized, it is a trinity that is very hard to find, that of culture united with leisure, and the desire to serve. It is not found often among the members of our trustee boards, and until it is, I doubt somewhat the practicability of the proposed plan, except for a very limited number on a trustee board.

The academic Munroe doctrine, like the original Monroe doctrine, develops difficulties in attempting to apply it, and I may be pardoned for pointing out these difficulties in order that they may be avoided.

Certainly a trustee board has a large and serious trust that cannot be deputized and one that must be administered in a large way. That we all admit. We also admit the necessity for as close relations as possible between that board and the faculty.

Let us, for the sake of getting down to facts relative to the present

relationship between the two, take up in detail a typical board. We find such a board made up of business men who are in the very midst of the strain and stress of American business life, professional men, who are clergymen or lawyers, also occupied with affairs, usually a few older men of some leisure, perhaps two or three women, possessing indeed the trinity of which I spoke, and on many boards, representation from the Alumni, whose province is quite distinct and not to be discussed now.

On examining such a board in detail, we would find the board possessing an executive committee, whose relation to the faculty is much the same as that suggested by Mr. Munroe. But on such a board as I have described, which is, I am sure, the usual board, there would be very few men available for executive committee work.

To extend from this executive committee to the board as a whole, or to a large part of it, any such intimate connection as Mr. Munroe advocates, would be fraught with great danger. Either the relationship would become perfunctory, and so of no value, or if we did require it from these men so absorbed in such widely divergent interests, short of time, biased by exclusive attention, each to his particular business or profession, we should be in a danger of hampering seriously a president and his corps of assistants.

I question also whether such a plan might not lead to too much direct participation on the part of some of the trustees in the method and plan of instruction, apart from the danger, also real, that such a division of responsibility would hardly be desirable.

If a teacher should stand on the platform with one eye on the pupil and the other on the president or trustee, we should not get his best. He must have complete freedom,—the German *lehrfreiheit*,—if we are to get from him his best self. To be a truly great teacher, he must be one, who like the fabled bird that nourished its young with its heart's blood, gives of himself without counting the cost.

We cannot get this if there should grow up any union of trustees and faculty that should partake in any way of the nature of interference on the part of the trustee, with methods of instruction or government. The relation should be one rather of intelligent sympathy on the part of the trustee, carried perhaps even to the point of the attitude of a learner. The point I desire to make is, that we have not now in America enough men of leisure to make such a close union as the one proposed practicable.

Lyman Abbott claims that the secret of his success as a journalist is that he makes it a point to get the best man possible for a vacant place and then give him an entirely free hand. When the subject of this discussion was telegraphed to me at Washington last week, where I had gone with my husband to attend the Bankers' Convention, it seemed to me at once that there was a close analogy between the

trustee boards of our educational institutions and the board of directors of a bank. I asked several prominent bankers, "Could you or would you be willing to run your banks by bringing your directors into this sort of a close relationship?" Each one answered in the negative. They were unanimous in asserting that where the greatest liberty had been given executive officers, the greatest success had been made. The directors of the bank are informed, as are the trustee boards, of the general policy to be pursued, and to a certain extent determine it, but this only in the broadest outline; the actual management rests with the officers, who would be much hampered if there was an attempt at a closer union between them and the directorate. Some such relation was in my mind when I framed these few remarks. The liberty I advocate is in intimate harmony with the entire trend of our American democracy and results in that self restraint which is the flower of liberty, and that self respect which is the flower of manhood.

There is, however, a wide field outside of academic activity where trustees, even the busy business man of to-day, can and should unfold a wholesome activity, the details of which are to be taken up later in these conferences; for there is not only the academic side, but the administrative and financial side, while paramount always is the duty of watchfulness,—not of detail, but of the whole.

Our colleges are founded, not merely to disseminate the knowledge the human race has accumulated, but as exponents of the best ideals of manhood, the harmonious development of man, physically, socially, intellectually morally. Often the one who is watching the trend of college life from some outside vantage point, such as a position on a trustee board would give, is better able to judge of the result attained and its relation to the larger life beyond the college walls than those in intimate contact.

It seems to me whatever plan is formulated, whatever coöperation is attained, it should not be too close for this wider view and that the real province of the conscientious trustee is to watch, watch, watch!

SECOND SESSION

THE ACADEMIC CAREER AS AFFECTED BY ADMINISTRATION

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It is my purpose to discuss in accordance with the central theme of this conference, the influences exerted upon the Academic Career by the present administrative conduct of university affairs. Whether or not we are prepared to admit that whatever is best administered is best, it seems both fair and profitable to judge the value of administrative provisions by the success with which they further the vital ends to which they are but means. Clearly the administration of a university is no end in itself, but only a subordinate contributory measure for advancing the real interests of the higher education. Boards of trustees and presidents and deans and committees would be only a hindrance and not in the least a help to the cause for which universities exist, if these offices could not justify their existence and the methods of their maintenance by their furtherance of worthy educational ideals. Altogether too long has there prevailed alike an unquestioned assumption that such is the case, and—still more unfortunately—a timid suppression or unpatient frowning down of any questioning in regard thereto.

It would be desirable, but may not be practicable, to consider in an historical temper, how American conditions have developed a distinctive scheme of university administration,—a system that departs from the models of the Old World in a direction peculiarly incompatible with our national ideals and principles. To say that the government of universities is undemocratic may be no fatal condemnation, but it indicates a singular departure from the spirit that animates many of our formal administrative measures even outside of the political field. The situation, moreover, is the more notable because foreign universities in pronounced aristocratic countries offer the contrast of placing the welfare of the culture and academic life—the authority as well as the responsibility—upon those whose life-work is bound up with, and furthered by such institutions, and of thus adopting for monarchical universities a thoroughly democratic form of government. President Pritchett's review of this and allied situations (*Atlantic Monthly*: September, 1905) may be cordially commended. He does not hesitate to say that our autocratic methods

of university management would be nothing less than intolerable to the German scholar, while emphasizing that the German method is precisely what the spirit of our institutions would presumably favor. This inconsistency of university government with the natural ideals which university teaching is called upon to foster, is certainly significant.

It needs no discernment to discover that the actual and authoritative government of our colleges and universities does not rest with the faculties thereof; it rests with the president and the Board of trustees or regents. In spite of the diversity of practice, the distribution of authority has unmistakeably emphasized, and increasingly, the importance of the presidential office and the regulative function of the board, and has given to the faculty a less and less influential voice in the actual direction of affairs, in the initiative of educational expansion and in the shaping and control of the academic career. The central question that cannot and should not be longer avoided—but which should be asked in a perfectly amicable, thoroughly helpful, wholly impartial temper, is whether present arrangements are to be approved and gradually improved; or whether they are to be regarded as fundamentally unfortunate, as something of a menace to the security of our educational future. If any profit is to come from the discussion, the same frankness that approaches so serious a question with honest doubt but without timidity, must be adopted both by those who uphold and by those who oppose the spirit and issues of actual institutions. In this spirit I place myself with those who look with alarm upon the further growth of present-day tendencies, and who believe that both logic and policy point to an administration of university affairs that shall be based upon a different emphasis of principles, upon a different administrative temper.

Doubtless many of the conditions both favorable and unfavorable have grown up in very indirect connection with any well-matured policy. They have taken shape rather by the stress of circumstance, by provisional expediency, by the necessity of advancing as one could if one were to advance at all; and this fact offers not only a large measure of excuse for existing deficiencies but also lightens the task of those who question whether future wisdom lies where the prudent compromise of the past has directed. I repeat, then, that the fundamental standard by which administrative means are to be judged is that of meeting the cultural ends for which universities are called into being. And with equal confidence it is urged that those whose training and talents and purposes in life are concerned professionally with these cultural ends are best fitted and most justly entitled to the shaping of the policy and the practical direction of affairs of the institutions whose guidance is an intimate part of their lives. The appeal of these principles to the judgment of those conversant with or appreciative of

matters intellectual, seems to me so overwhelmingly strong that the mere placing of them in this fundamental formative position is adequate to common and general assent.

The practical interests transfer the discussion to the limitations and possible dangers of too formal a following of this doctrine. For, above all, the situation is a practical one; here, as elsewhere, a condition confronts us, but also here, as elsewhere, a condition that derives illumination from an application thereto of an appropriate theory. American conditions, as they effect universities, are so complex, so unprecedented, and so entirely unprovided for by governmental or other regulations, that we must solve the problems of their maintenance more independently than would be the case in older communities. It has been our national fate to be called upon to feel our way by practical wisdom, often by a hand-to-mouth policy, with justifiable satisfaction at the notable achievements that followed so closely upon the remoteness from opportunity of the pioneer. This intensely practical development found natural expression in assigning the management of academic, as of all other public concerns, particularly as matters of finance, to a non-professional body of citizens; and to this body has been given the largest legal authority and indirectly a peculiarly formidable control of the entire university interests. That this control has in the past been variously unfortunate is not a point upon which I wish to dwell. Let the past stand as it is, and serve its worthiest purpose in warning against the dangers of the future. The practical issue arises not so much from the constituted authority as from the mode of using it. Here is the nub of the whole matter; and here some measure of human psychology enters. It seems difficult for our civilization to foster the type of man who has authority but finds the highest use of this possession in the restraint thereof, inholding it in check for an emergency. Why have authority if not to exercise it freely and conspicuously, even to the show of power for the sake of showing power! Other ways may be better; but what we say "goes," as the phrase of the street has it. Naturally such an impulse can find consoling excuse for its distrust to yield to others any share of vested authority, can readily overlook that not the statutory provisions, but the spirit in which they are carried out, forms the essence of all that is writ in the laws and the prophets. It is possibly because this quality of human nature—for which the American idiom has evolved the term "boss"—is less pronounced in the academic man than in almost any other, that he finds it difficult to realize how vitally it affects the motives and actions of men devoted to other affairs. I confess that I found incomprehensible the declaration of one whose character commands my admiration that he would far prefer to be mayor of Chicago than President of the United States; and for no other reason than that the exercise of the personal power of which the

former officer disposes, would furnish him with the keenest satisfaction, the most deeply felt tribute to his own success. That such type of man possesses many qualities of great value must be admitted; but such qualities are in no situation less appropriate than in the governing boards of universities; there, if anywhere, is needed one who finds within him no impulse to use power wantonly, no tendency to control where coöperation alone is desired, to interpret his office in any other spirit than of determining, with generous confidence in expert opinion, what ends are most to be desired, and of using his practical wisdom in aiding the purposes of the common cause. As the national experiments in benevolent assimilation have been more notable for their assimilative than for their benevolent success, so has the trustees' interpretation of coöperative control emphasized the latter to the disparagement of the former element. That the correction for this tendency lies neither in the abolition of the board of trustees, not necessarily in its reconstruction, but only in the transformation of the policy by which the division of authority between them and the faculty shall be regulated, will appear in due course.

I must here intrude a word of explanation. My task requires that I speak frankly of existing conditions; and were anyone disposed to misinterpret the spirit in which that is done, personal considerations and the reference to particular men or institutions might be read into a discussion in which they have no place. I shall offer no affront to any who may be interested in what I have to say by implying any such misconstruction. The discussion will be maintained upon a wholly objective basis. As is regarded as proper in speaking of the dead, I shall refer to no particular institution except to praise it. Yet I would not have it said that I am speaking of imaginary or exaggerated conditions, not of real ones. I have constantly in mind actual conditions in definite institutions; I find it necessary to exercise caution not to refer to them so definitely that their identity will be surmised. A deliberately cultivated acquaintance with many members of many faculties, a considerable range of earnest and confidential discussions of actual conditions is the basis of my observation. My observations may be faulty; but they are free, they are honestly acquired, and have slowly matured. Some may be inclined to consider the conditions over-drawn, because they have in mind the few most exceptional universities in which the spirit of administration is far more favorable than I picture it. It is the average, not the exceptionally best, that counts in this discussion; and it is the average to which I address myself.

Let us remain a moment longer with the bare description of things as they are. The *status quo*, summarily exhibited, recites that the board and the president dispose of many, most, or all of the measures that affect in any decisive manner the growth and official welfare of the university, and that affect the personal and professional welfare

of the professor. The board in framing its edicts looks to the president as the source of the initiative; sets great store by the president's approval; follows his lead in determining academic sentiment or university needs; awards medals of gold or silver or bronze, or dismisses with honorable mention or without it, in accordance with his verdicts; decides what shall be done first and what last and what not at all, largely according to his judgment or preferences. In all this it depends, as a rule, wholly upon the temperament of the president whether he consults or does not consult the faculty opinion. His measures may, and most of them do, go directly to the board; they are announced by the president to the faculty as final decisions; and the faculty is called upon to carry out the decision in reaching which they have had no part. Officially and authoritatively, the faculty enjoys—as one is said to enjoy bad health—painfully restricted rights. Its members naturally make their influence felt through unofficial, mainly individual prestige. Yet in many academic autocracies, the president would look askance upon the direct conference of a member of the faculty with a member of the board, especially to urge views opposed to his own. This is the situation stated in its mildest, most objective terms. Introduce a tactful, sympathetic personality,—and the even tenor of academic life is likely to proceed with reasonable serenity. Many colleges, particularly the smaller ones with simpler problems, more unified interests, will be happily governed by any system and under such leadership as they are likely to accept. But surround the situation with the actual complexities of a great and expanding university, and inject into this relation what the gods occasionally or oftener give unto masterful men,—personal ambition, a secretive habit of mind, a protective insensibility, a pseudo-diplomatic behavior, and the love of power that seems to come with the executive title—and you have a situation that may vary from the ridiculously irritating to the sublimely intolerable.

I am tempted to refer, though maintaining the incognito to a recent experience. A member of a faculty propounded to me the attitude of its president as a psychological problem. I was unable to give any enlightenment, but this is the enlightenment that I received,—the result of a careful inductive study. (1) Whenever President X announced to his surprised faculty that the *board* had adopted such and such a measure, it proved to mean that the president had proposed the measure to the wholly innocent board, and that it was a measure that the faculty, were it given a chance, would have cordially opposed. (2) When a measure was "up" before the faculty, and opposition unexpectedly developed, an announcement was made by President X that there were reasons, which unfortunately he could not disclose, that really made the measure necessary—and this meant that if not approved by the faculty, the board would take the proposed

step anyway. There were two other types of situations that entered into this psychological analysis; but they are too individual to make it proper to cite them.

The academic comment that occasionally reaches the college president's ears to the effect that his troubles are largely of his own making, is intended to remind him that he encourages, or complacently accepts—does not, at all events, protest against and strive for the abolition of—the conditions out of which troubles naturally grow. When the presidential policy—or better the university policy—shall favor the settlement of intrinsically educational questions *by* the faculty and not *for* the faculty, the president's lot will be a happier one. The principle that the essential questions, the critically formative and expanding measures, the issues that make or mar the academic career shall be shaped by faculty consideration, equally demands that they shall not be authoritatively or virtually disposed of either by the board or by the president. As to the actual business of the faculty, it is a rather dreary tale. Details, routine, student affairs, occasionally a real issue that somehow reaches that body, but in regard to which they can act only conditionally, not authoritatively—such is the situation that naturally encourages inconsequential talk, inefficient deliberation, restrained initiative. It is nothing short of absurd to withdraw from faculty discussion all the real educational issues, and expect a company of scholarly men to grow enthusiastic over the privilege of wearily debating how a sophomoric attempt to vault over or climb around the regulations shall be thwarted, or whether the Mandolin Club both played and behaved so badly upon its last venture, that its leading strings should profitably be shortened. One can comfortably resign oneself to picking the bones when one has dined off the fowl; but to have the bird presented after it has been shorn of its attractions at the first table makes a sorry feast.

At this stage we must examine with the practical purpose of this discussion, the types of questions and interests that require consideration in university affairs. There is first the appointment of the instructional staff. In this respect enlightened opinion has accomplished a notable success. In the best type of universities, those most closely concerned have adequate means of making their opinion effective; the president and the board take those executive and formal steps that lead to the election of the candidate and adjudicate where some final authority must assume responsibility. Where this is not the case, the tendency is at least favorable to such a consummation; though abuses of privilege are by no means obsolete. Yet the fact that this phase of the situation has approached a most commendable status should be as frankly emphasized as other less satisfactory phases should be frankly condemned. In principle many prefer the practice of Yale University, in which such nominations are

presented for the approval of the faculty. With the proper spirit, the essential ends are accomplished by either procedure.

When we come, secondly, to the matter of promotions and salaries, the situation acquires a sombre cast. In some few institutions the methods, though not perfectly so, are commendable, in many others moderately perverse, in the rest intolerable. Merely because that is another story, (yet a closely related one), do I reluctantly pass by the burning question of the inadequacy of professors' incomes. I content myself with the expression that were those salaries as nearly adequate as they could readily become were sentiment properly effective, certain of the administrative problems would find readier solution; yet in saying this I wish also to emphasize the converse: that were our administrative provisions more suitable, the professors' financial status would have been far more favorable than it now is—and of this more anon. That there obtain widely different opinions as to what a professor should be paid is inevitable; that there should prevail such general misconception as to what influences should determine his compensation, is not inevitable, only unfortunate. This text, also, I must not allow myself to elaborate, though there is strong temptation to do so.

As an administrative policy, the salary problems should be and in large measure can be solved by preventing them from arising. Policy is here all important. With many others, I hold as desirable above all other arrangements, an effective provision that shall pledge a definite and dependable living for worthy service. This would go far toward avoiding the constant and irritating perplexities that from time to time, and in some institutions at the close of each academic year, present themselves with threatening features to be somehow appeased. A system of this general type is well established at Harvard University. What I emphasize as essential therin is that men are elected to positions of definite rank, for definite periods, with definite understandings. The central issue that is to be determined at the close of the period is whether the university desires to retain the services of the occupant; if so, he steps to the next grade with constantly increasing salary. A normal line of advancement is thus provided. More rapid promotion is always open to promptly established worth and efficiency, and should indeed be the rule, not the exception. Such measures of elasticity the system designedly retains. There is always opportunity for any one to present such considerations as may be proper, and to reinforce them by such arguments as may be suitable, to urge the promotion at such time and in such degree as the circumstances warrant. Speaking generally for all whose fitness for the academic life has been established, the question of salary is as nearly as possible disposed of; and advancement is secure. Such a system represents about as practicable a compromise between ideal

situation with that of the *Privat-Docent*, who, though with most precarious income, found no hindrance, when once launched upon academic seas, to shaping his career according to his talents, in steering for such ports and by such routes as his survey of the chart directed. That intense and crippling sense of accountability—to which President Pritchett has likewise directed attention—is all but absent from the *Privat-Docent's* career, as it is likely to crowd out by its insistent demands almost every other serious purpose of the young instructor. Confessedly the advantages are not all on one side; but the unnecessary hazards placed in the way of the academic aspirant among us, make the academic career partake altogether too largely of the nature of an obstacle race.

I am aware that the objection may arise to the sombre tones of my palette, that will protest that such a delineation is the natural result of viewing things through a murky atmosphere or through congenitally disposed obliquities of vision. The delusion is, however, a rather general one; the difficulty is only that it does not find public expression. It is in the confidential talk with others of kindred spirit and experience that a man's real opinions come to the fore. The front that he shows to the world—and that without any fair charge of hypocrisy—is wholly different from his private opinion for home consumption only. I have in mind a professor of national reputation, with a quarter-century of successful experience in distinguished institutions of the land, with many honors to his name and many public addresses to his credit extolling the successes of American education. This scholar had no hesitation in admitting to me confidentially that in any true sense we had no universities in this country, and certainly no academic life; and that in his own career a larger measure of his success than he cared to reflect upon, was probably due to his yielding to influences that his ideals condemned. With not the slightest breach of honesty in his purpose as conceived by approved standards, but with the inevitable compromise to practical necessities, his career had deviated from what under more favorable conditions it might well have been. Such a man is not to be censured; he is the victim of an unfortunate situation; and it is only because such situations may in large measure be relieved by a proper administrative temper, that it becomes proper to cite the instance in this connection.

It is well to return to the practical aspect of the situation. What the average university presents in lieu of an academic provision is little more than a corporation of an industrial type in which groups of men have been engaged to perform given tasks. The tasks are often liberally conceived, and personal worth properly regarded. Yet the temper is such that commercial considerations enter; and the tendency is rarely absent that makes the first duty of the management that of securing the work done upon the most economical basis possible. The

irrelevancy of this attitude is too complex a tale to attempt to disentangle here. Ideals and policy must come first; and practice can only be worthy when the motive force of such ideals can find expression. With the absence or the weakness of worthy ideals, lower ideals inevitably enter. In the present consideration it may be emphasized that a university can be built up about a group of professorships and about nothing else. Academic benefactors will not have accomplished their highest degree of efficiency until they recognize in such endowments the most intrinsically valuable form of aiding universities. Whatever hastens the day of liberally provided professorships will ennoble and simplify the administrative problems of universities.

A further class of administrative measures relate to the direction of university growth, the nature of its extensions, the distinctive character of its purposes, its mode of meeting public needs. These questions are far more pressing in so rapidly a developing community as ours than they are in older civilizations in which the purposes of university activity have become fixed by convention. It is in regard to this set of measures that the initiative is so commonly taken by the president alone; and it is precisely with regard to these that the principles to which I adhere favor and demand a vital and authoritative consideration on the part of the faculty. It is because a portion of these measures must be determined by the provisions of the budget that to some extent the budget itself must be included in this group. As it is, faculty opinion has in most institutions no opportunity to express itself in regard to that which concerns the faculty most intimately. Upon this aspect of the matter I have touched in the general statement.

There is finally a group of minor administrative details, also involving financial matters, which intimately concern the academic activities. I refer to such matters as modes of conducting laboratories, of securing material and all the inevitable business of handling apparatus, and the house-keeping side of instructional and investigative work. This is clearly partly a business matter, and as such belongs to the board, but likewise is it in equal part, a matter that affects the efficiency of the laboratory and its work. The contention thus seems just that some mode of administration shall be devised which shall be as satisfactory to the director of the laboratory in the matter of meeting his needs, as it shall be to the administration as business procedure. This, as many another question, is one that concerns jointly these two coördinating parts of university administration; and can be met only by joint consideration.

And now let us bring these various considerations into mutual relation. The system that so generally prevails and whose deficiencies detract from the value of the academic career may be called "government by imposition." Possibly this is a harsh word, but to the pro-

fessor who is obliged to pursue his calling under it, the measures which it enforces are often harsh measures. The system which is advocated to replace it may in like brevity be termed "government by coöperation," with the explicit interpretation that the government is by the faculty and the coöperation the function of the administrative officers, including the president and the board. The management of the university's material affairs advantageously falls to the board, and what shall be included under this head is not likely to be a serious point of contention, if once it be admitted that many material provisions directly influence the work of the faculty, and that for such the faculty shall have a voice in determining how these material affairs shall be administered. Assent must be gained for the view that the faculty is quite capable of determining whether the needs of the institution make it preferable to administer certain details themselves or have them otherwise regulated. So long as measures are not imposed but are the issue of deliberation of both bodies acting co-operatively, concord and progress are assured. For the most part the material administration may well remain where it is now placed; but the right of discussion, of opinion, and of protest should be freely exercised. Even with similar measures, the spirit of the administration and the dignity and security of the academic career, would be wholly different under the two systems.

To what measure the present system of administration is due to the irrelevant transfer of methods suited to a business corporation, to institutions flourishing under conditions of wholly opposed character, I cannot stop to discuss. Many critics find in this perverse application of glorified business procedure the source of academic inadequacy; others count it as but one of several influences, and not the chief. What is unmistakable is the pernicious dominance of the business spirit both in the administration and in the academic interests. I prefer to speak of the internal influences as more closely allied to my theme. There is at work among American universities a spirit of intense rivalry, a desire for each to measure its own work by standards of tangible material success. College presidents like to be remembered by the buildings which were erected through their initiative, by the departments which have been added, and the enrollment which has been increased. It is by urging these needs and presenting these successes that funds are secured. If such were really the standard by which educational ends are to be appraised, then the business methods might well be adapted to the university affairs. It is against this false standard that the warfare must be actively directed. It would undoubtedly be the most beneficial fate that could happen to many of our universities to-day if for a considerable period they built no new buildings, added no new departments, found their enrollment gradually decreasing and centered all their energies upon the internal

elevation of true university ends, upon providing for the student and professor alike the intellectual environment in which those interests thrive for which the student and professor come together, by which the academic ideal is inspired.

The same spirit is felt throughout every detail of university life, from athletics up or down as our standards may be. It tempts the professor to spend his energies in securing large classes; it sets departments to devising means to outrank in numbers the devotees of other departments; it makes the student feel that he is conferring a favor upon the university by coming, and then upon the professor by choosing his classes; it leads the administration to value the professor's service by his talents in these directions, to appraise executive work, at least financially, far more highly than professional service; and, worst of all, it contaminates the academic atmosphere so that all life and inspiration go out of it, or would, if the professor's ideals did not serve as a protecting aegis to resist, often with much personal sacrifice, these untoward influences.

In bringing these considerations to a close I must first defend my position against certain objections that are apparent, and then focus the discussion upon the remedial aspect of the situation. I am confident that I do not undervalue services that have been done for American education by the very types of administration against which I protest. A strong case may be made out for the opinion that for the work that had to be done and the conditions that obtained, it was the only method available and a good one. My face is turned to the future; and the recognition of past achievement and fitness is no token of increasing service under more developed conditions. The general advantages of the presidential form of government are equally obvious. The cause and the strength—I cannot bring myself to say the justification—of the conditions which with so many others I deplore, are not far to seek. Those who defend present academic arrangements bring forward pertinent considerations, to which any one approaching the issues in a practical temper will give due weight. The advantages of centralized power will not lightly be set aside; nor is there any reason for losing the most essential of them in such reconstruction as is needed to rehabilitate the academic career. We need not repeat the common educational mistake, so neatly pictured in the German phrase of tumbling out the child with the bath. Wisdom as well as sanity is the name for a certain perspective of values. In company with those who share the attitude of my protest, I am keenly sensitive to the obligations that our educational welfare has incurred to the very offices whose policy and activity I cite as but slightly commendable.

I am calling attention to the fact that these pearls of price will have been too dearly bought, if they lead to the deterioration of the academic career through loss of dignity and attractiveness to those to

whom they should make the worthiest appeal. The very qualities upon which emphasis is laid brings types of men into high office and into the academic chairs who have not within them the possibilities that contribute to the inspiration of the institution of which they become an organic part. Confining the issue to the administrative aspect only, I am content to repeat the comment of one of the speakers of this conference, whose point of view is hardly likely to be regarded as prejudiced. He tells us that "young men of power and ambition scorn what should be reckoned the noblest of professions, not because that profession condemns them to poverty, but because it dooms them to a sort of servitude." And as a forecast of the future in the light of the present, this: "Unless American college teachers can be assured * * * that they are no longer to be looked upon as mere employees paid to do the bidding of men who, however courteous or however eminent, have not the faculty's professional knowledge of the complicated problems of education, our universities will suffer increasingly from a dearth of strong men, and teaching will remain outside the pale of the really learned professions. * * * The problem is not one of wages; for no university can become rich enough to buy the independence of any man who is really worth purchasing."

A situation that calls forth such earnest, disinterested protest cannot but be sombre in tone. Yet I am anxious to reveal the touch of optimism that makes the world akin, and record that the brighter colors have as legitimate a place in academic portraiture as my enforced selection for this occasion of the neutral and darker grays. The compensations of the academic life are real enough; they simply form, like much else that I have omitted, another story. I should be sorry to have it inferred that a happy academician must be sought by the despairing light of a Diogenes lantern; though I have implied that in one's less hopeful moods, the lamp of learning seems a precarious illumination amid the blinding incandescence of the rival interests of our intensely modern life. The devotion to the purer, more sensitive flame is in fact endangered; and those whose responsibility and consolation it is to hand it on to others with undiminished ardor, have cause to feel that their vocation is shorn of favoring fortune, is beset by lack of power to order their lives by appropriate standards, is embarrassed by needless and remediable adversities.

I must also forestall the deduction which would be quite wide of my purpose, that I am in any sense advocating the abolition of presidencies and boards, and am proposing measures far too radical to be practicable. On the contrary, I concede that the present mode of administration if it can be freed—as there is good reason to believe it can—from the spirit of its practice that now seems dominant, is a very efficient and commendable method of accomplishing a purpose which from the outset has been set forth as a subsidiary means to an

end. If it furthers that end, it would in my judgment hardly be worth while to change it even if that were readily possible. If the present *spirit* of administration is the inevitable result of the present *method*, then the method cannot be commended, however modified. Here the ways divide; and the judgment of expediency has a more commanding voice, which it should not raise, however, in defiance of principle.

It would be possible to frame an academic decalogue, the obedience to which, though it would not ensure the realization of all the ideals would guard against the more obvious transgressions. I shall content myself with suggesting but two of the provisions. The first is the introduction of a definite system of salaries with such liberality as may be possible, that provides for promotions and increases, and establishes the academic applicant upon a definite footing. This measure is not proposed as a panacea, and can at best be but negatively effective. Yet it has great positive value under present circumstances, for the reason that only when this phase of the matter is disposed of, is it possible satisfactorily to consider other weighty issues. It is most unfortunate that this financial aspect must be placed so prominently in present discussions; for such prominence but enforces the inadequacy of the academic situation. It would however be foolish to disregard this irritating stumbling-block, which must be removed if academic freedom is to be maintained. The professor desires money in order that money considerations may not enter disturbingly into his life; and universities should once for all determine matters of salary, in order that their energies may be more profitably expended.

The second provision is that no measure shall be decided by the president or the board without giving the faculty an opportunity to decide whether it cares to express itself upon that measure or not. Such provision inevitably carries with it the right to have a share in deciding in the first place what division of questions shall be made between faculty and board. To accomplish this end, an advisory committee of the faculty seems an efficient means. Such committee should decide in each case whether and how far questions should be considered by the faculty; and naturally the president, as a member of such committee, will bring before it first and for approval *all* measures that he regards as worthy of the attention of the board. An arrangement of this type is in force in Leland Stanford University. With slight change in the apportionment of the present authority, such a measure will be adequate to bring to the faculty a voice on all questions upon which, in its own judgment, its expression of opinion would be for the best interests of the university. Such committee would attend the meetings of the board and participate in its discussions, though without right of vote. The president would serve as the formal spokesman of faculty influence, and could then be, what

it should be his highest ambition to be, the leader, not the governor, of the faculty and a defender of the academic life.

I have no desire to lay minute stress upon particular remedies, which must always take their shape from local conditions, though in still larger measure must they be framed by ideals and purposes, that are much the same wherever the academic spirit is cherished. I desire only to remove the objection that practical measures to remove difficulties cannot be readily devised. I know very well that changes of ideals and purposes must first inspire confidence and enthusiasm before they reach practical possibilities; but I am encouraged by the example of so many other educational and national evils, that once clearly recognized, have in astonishingly brief time been swept away by the strenuous purpose of the national temper. It is in such a movement that the present discussion would find the most desirable consummation.

I am fully aware that no such administrative reform is to be looked for until the ambitions that universities and particularly their presidents cherish, are considerably altered. When internal culture measures are acknowledged to be the leading issues of the academic life, it will fall more and more to the faculty to carry them out; there will be less and less need of the present type of president, less temptation to develop the office primarily for those functions which it now serves. The type of individual that will then be sought for the position will be selected by a different perspective of considerations; and the academic career will have greater promise of reaching a worthier status than it now occupies. First, as last, it is directly through ideals and indirectly through administrative provisions that further ideals, that the welfare of academic concerns is determined.

DISCUSSION

By **PRESIDENT J. W. MAUCK, LL.D.**
President of Hillsdale College

It has never been my privilege to be associated actively as professor or as president of a large institution. I have never known the type of president that has been described here, yesterday and the day before, and to some extent, this morning.

This is not a criticism upon the paper read this morning, because I am in thorough sympathy with it, so far as I understand it. It is a clear paper, but it is prepared from the standpoint of a large university, and I cannot present views upon the justice of the statements. A president such as described in one of the papers on Tuesday is one that I did not know existed. He would be the personification of that beautiful injunction of the Scriptures—"Be ye therefore perfect, even as your Father, which is in Heaven, is perfect." I do not believe that type of man is to be found. There will be weaknesses in all men,

involving failure at some point. I apprehend that a president of the kind described is influenced in his decisions and administration a great deal more by the views of his colleagues than the public generally understands. In a small way I have known college professors and presidents and boards of trustees, who are a type very widely different from that we have been considering for the last two days. I am speaking from my own personal experience in a small university, and one denominational college. I have never known in either one of these institutions an instance in which the president did not carefully and patiently consult members of the faculty. I believe it is quite commonly true, at least in smaller institutions, and I suppose to an extent in the larger institutions, that appropriations for departments are left largely to the discretion of the president, as advised by the faculty.

I have known of two institutions, and there are a great many others, in which the needs of the departments are all carefully considered, and, in so far as the resources of the institutions will permit, the president is left free as to the applications of the funds to the different departments, and is held accountable for the results. It has been said, owing to the great multiplicity of the interests involved in the large institutions, that this centralization of power has become a necessity; but the very conditions which make centralization a necessity disqualify any one man for the discharge of those duties. And to exercise centralized power, those conditions necessitate general consultation with the departments.

Of the many valuable points presented in the paper just read, which it will be a pleasure to me to remember, the central one is that, after all, existing conditions arise from the changed interpretation of what a college or university is. The remarks as to advertising on the roofs of buildings suggest that the point which must be attacked is the whole administrative spirit of institutions. It has not come to be a question of development of human character, the elevation of social life, which the writer of the paper has justly said is the true and only function of an educational institution. It is from losing sight of that ideal that all of this trouble has come. It seems to be not a question of how great we are, but as to how large. To-day we have, I truly believe, in many institutions, small and great, too much devotion to the popularizing of a name, and too little devotion to high ideals.

PRESIDENT JAMES H. BAKER, LL.D.
University of Colorado

It seems a little inappropriate that college presidents should have much to do with this discussion, but I was very much interested in this paper.

The college or university system in this country is peculiar to this country. We are doing work in a way in which it was never undertaken in any other country. I wonder whether Oxford to-day would not be better if it were so organized that it could feel the influence of leadership in touch with progressive sentiment. I wonder if the universities in France, for instance the University of Paris, might not accomplish some things better if the rector had some power that was not prescribed for him in detail by the central government, and if the institution was so organized that some initiative could be taken by the institution itself. In France the position of a professor is exactly defined and guarded.

If the writer of this paper had referred to Clark University, or Johns Hopkins University, I could appreciate his point of view, I think, perfectly. It may be we are going wrong. It may be we should have only the genuine university in this country entirely separate from any college function. But so long as we have the college in which most of the so-called university work is done, it may be that that dignity, which belongs to the professor, would be hardly a substitute for the kind of leadership we have in a college president. This question of democracy is a great question. Somebody has recently said that just now the monarchs of the old world are sitting back comfortably and saying: "Of course, in a democracy there is nobody to take care of the people."

I think that a faculty which governs itself in an extreme degree is likely to be exceedingly conservative; is likely to perpetuate tradition; is likely not to be in touch with progressive thought, although it may tend to produce a few great geniuses. We have a great president of the republic, who is assuming some leadership, and I think to the immense advantage of this country.

Let me refer to an institution that of late years has been developing considerably. I know some years ago the faculty very largely controlled its affairs. It was a state university. It had no students, or almost none. But, they said, and said publicly and frankly, "We are a strong faculty, we are scholarly men, we have high standards, we propose to maintain them, we do not care anything about the public, and we do not care to have students, unless we can have them at the ideal standard." Now the people had established that university for the graduates of the high schools, and the people began to say they would abolish the institution unless it served its purpose. They demanded that the professors go to every high school in the state,

and advertise and make known that there was an institution supported by the people of the state for the benefit of the state. That work never would have been done by a faculty controlling its own affairs, without leadership. We must have leadership that will connect the faculty with progress and with the people.

I admire the ideal that was presented. I am so constituted that I would like to see that kind of an institution exclusively in this country; but I am not sure that I am not wrong in that feeling. I am not sure that the work we are doing, which requires leadership and organization, is not better for our democracy. I suggest these things for discussion.

PROFESSOR RICHARD JONES, Ph. D.

Trustee of Iowa College; Professor in Vanderbilt University

As bearing upon the subject before us, namely, the academic career, what it has offered in the past, what it may offer in the future, especially what it may offer in the future, let us consider for a moment the University of Illinois with its really magnificent plant—which has sprung up in a night, as it were. For the very unusual additions to this plant, made in so short a time as a decade, due credit has been gladly given on all sides to the great administrator who has stimulated and guided this remarkable development. But now that this work is to a large extent accomplished—for it would appear to the visiting observer, or the observing visitor, that there can be little need of additions to the plant, unless perhaps something here and there to round out and complete a perfect whole—this great State, it is evident, has in mind nothing short of perfection,—what would now appear to be the work of the incoming president and his board of trustees? Obviously, to make the best possible use of this plant, to get results, educational results. That is to say, the work of the individual professor, both in instruction and in research, now becomes relatively of greater consequence than ever before. The erection of the plant was a work of such paramount importance that the teaching professor, even though there were scores of him, occupied for the time a place of comparative unimportance. But now that the plant is established, and due honor for the great work worthily bestowed, there will be leisure for observing that a plant is of small value without the best possible instruction. And thus it will come about naturally and easily that the individual professor will come into his own. The administration, no longer under the necessity of securing funds for new buildings, can now devote its energies to making attractive to the professor the academic career, to the professor who finds his joy in life in his work as a professor rather than in a deanship or any form of administrative work—especially affording him opportunity and leisure, that is, freedom for mere drudgery, for doing some research work of

his own, which is to the university professor the breath of life, enabling him thus to extend the boundaries of knowledge a little into what Carlyle has called the "Circumambient Realm of Nothingness and Night." And as the development of the University of Illinois is typical of that of many other American universities, except in the unusual rapidity of its development, we may perhaps conclude that the pains endured by the university professor generally are "growing pains" and await the day of deliverance.

But though these pains are evidence of life, let us not deny the pain. Even on this happy occasion, when evidences of wonderful growth meet the eye and statistics greet the ear and the atmosphere is filled with the halo of the greater glory yet to dawn, let us not carelessly assert that "perfection, nothing less, greets us here." There is probably not an institution in all this great Mississippi Valley that could offer a professorship which would induce a professor, a full professor, of Oxford, for example, to resign, even leaving out of consideration any question of home and native land.

Much yet remains to be done to make the academic career as attractive and useful as it is possible for it to be. Happy they who live under an administration which *knows*, which combines sweetness and light.

PRESIDENT BROWN AYERS, LL.D.
University of Tennessee

I confess to a great deal of sympathy with the feeling of the distinguished gentleman who has read the paper under discussion, and have been conscious in past years of a considerable conflict in the State in which I have resided in regard to those matters. I have been forced to think a good deal about this whole question from my interest in an institution that is known to all in this country, and which had lately changed from an institution governed by the faculty into an institution governed by the president; namely, the University of Virginia.

I am very well acquainted with a number of the faculty of the University of Virginia, and in personal conference with them, I have heard from time to time in the course of years, a good deal about the growing impatience on their part at the amount of business detail forced on the faculty because of this faculty form of government. The professors in charge of departments were beginning, I think, to feel that it was really no part of their business, as teachers, to attend to all those business details. We have there a very excellent illustration of an institution that has been very conservative in regard to the matter of faculty government. It has been compelled by the opinion of the men, who constituted the faculty, to abandon that system, to a very considerable extent, and adopt the system of having the presi-

dent accountable for the control and disposition of the funds of the institution. The system of a limited power in the hands of a chairman necessitated the agreement of the faculty to a very large number of business details, which proved unsatisfactory and had a tendency to produce impatience on the part of the faculty.

It seems to me desirable to have the influence of the faculty largely determine the general educational policy. The only question arising is whether the system of faculty government, suggested by the speaker, would have any very considerable advantage over the system in use in our institutions at the present time; where the president, by means of an academic council which represents the various departments, or by means of an academic senate, or some similar body, gets at the sentiments of the faculty as nearly as possible, or gets them by personal conference, as suggested. This is rather a difficult question for me to answer. Whether any thing more would be gained by a more formal system than is gained by our present somewhat informal system, which is fairly effective, I am not prepared to say.

The business necessities of the case call for efficiency. This led to organization and centralization of power; and it all reduces itself to what character of man the president shall be. Of course, if the president is an unfit man to hold the office, I think that would soon become apparent, and dissatisfaction on the part of the faculty and the public would push him to one side and make room for some one better qualified. With this reasonable amount of preparation in scholastic learning, enabling him to appreciate the educational side of an institution, and with common sense and tact necessary to administer the business of an institution, I do not see that serious menance which Dr. Jästrow has pointed out. We can see that the abuse of the office would lead to a great many difficulties. I have some sympathy with the general plan he suggests in regard to the system of gradual promotion—a logical system of promotion; I believe, if such a system as that could be devised, it would be very satisfactory and every college president would be glad to have it in operation, because one of the most difficult things I can conceive is doing real justice to all members of the faculty. But any mechanical system that could be devised, I can readily see, might very often have the effect to hold a man in an institution who ought not to be there, and encourage those to go on who are really not fitted for high positions. There would come to be, at the end of five years, a very awkward condition of things, in which a man would have to be turned out entirely by reason of unfitness for promotion, when otherwise he might still be made useful in some minor position.

The present system, defective as it is, is elastic enough to allow a man to be held for the real value that he is to the institution, and at

the same time he will not be encouraged to think he is more valuable than he is.

I realize the great difficulty along this line, but I must say I do not think the scheme suggested by the paper would have many advantages over the method now in use.

MR. S. A. BULLARD, M. Arch.
President of the Board of Trustees of the University of Illinois

I hardly feel like talking in the presence of so many college presidents. However, I might say a few words in reference to the history of the University. At the organization of the University, the trustees were appointed by the governor. There were five appointed from each of the three judicial divisions of the State, and one from each congressional district of the State. There were three who held the office by virtue of holding some other office in the State, one of them being the president of the University. He became a member and also president of the board. There were thirty-two members of the board at that time. Operations under that regime did not last very long. The arrangement seemed to be unsatisfactory. The board was a large one, and it put into the hands of the president of the University immense power. He not only had the administration of the University itself, but he had the administration of the affairs of the board; and as you all know, in assemblies of that size, the president can pass almost any measure by the gavel, that he wants to pass. So as a matter of fact the president had almost unlimited power. Only a few years after the legislature entirely changed the whole system. They reduced the board of trustees to eleven members, of which the president of the University was no longer one. It has been since then increased to twelve members. Nine trustees are now elected. The state superintendent of public instruction is now a member; as is the president of the state board of agriculture, and the governor, making twelve in all.

This change arose from the fact that at that time the people—I say the people, because it was through the legislature—felt that too much power was placed in the hands of the president of the University. A change was made because of that fact, although everyone in the State, including every member of the legislature, had the highest regard for the President of the University. He was our first President and he remained President of the University for a good many years after that change was made. While perhaps he did not approve of it, he accepted the change and went on with the work, and I think the University grew and prospered more after the change than before.

I feel like saying also a word or two in regard to advancing professors. The system, as laid down by the writer of the paper

under consideration is a most excellent one. We ought to have some system of that kind. However, I think the system should not be made unbending. It should be elastic, and very much so. Every officer of a corporation has to pass an inspection once in a while; this is true from the president down to the least important officer. Presidents of universities also have to pass under inspection, and it comes up in the board every once in a while whether it would not be a good idea to have a change of administration. This question is raised also as to heads of departments and to professors, not with any serious intent perhaps; and yet there is a feeling going about, especially among members of boards of trustees, that we ought to continually inspect the work of each one. Every president here knows that fact; so that if we have a rigid system by which promotion may be expected, it is evidently going to work a hardship to some members of the faculty. For instance, a certain member of the faculty is apparently not strong. He does not shine like some others, but he is a sober, earnest, hardworking man and accomplishes what he undertakes to accomplish. He moves like a great ship, slowly, but powerfully. His character is not noticed so readily as a man who is able to shine on every occasion where he might be brought forward, and we see no kind of surface illumination in his character, or in his position, or professorship, which expresses the real relationship between him and the others of whom I have spoken. Judgment has to be used in such a case, lest a man might be dropped who does not shine brightly, but whose work in his department gives good results, and promotes the general interest of the university. What are you going to do, when the five years are up? You will, under the system suggested, have to say to him that he must drop out. Yet he is a good man. You can hardly find any fault with him. But you say he is not nearly so good as some others, and shall these men be promoted equally? It is a difficult matter to deal with and do justice. We cannot make a cast-iron rule for the promotion of every man. Men must stand on their individual qualities and character.

I agree with the writer of the paper in very many of the things he has said, but I believe that an unlimited power in the faculty is not wholly desirable. There should be some power that can be appealed to for final settlement. Not only that, but there must be some executive power to determine almost all of the matters that arise, and that power can be lodged in the president. It can be done, it seems to me, most satisfactorily in that way. If the president is the kind of a man who ought to be president he is a fellow with the faculty. Moreover, he is a fellow with the members of the board. The fact is, I sometimes think, that the best president of a university, is the president who can handle the board right. It shows the tact and power of the man.

If he can handle the board right, I am sure he can handle the faculty right. By this I mean a president who grasps so clearly and fully the truth of matters and has the ability to put them before his board and his faculty so forcibly that their indorsement of his views and recommendations will naturally follow. This I regard as a proper way for a president to handle his board or his faculty.

A board that is elected by the people has duties to perform of a very different nature, and looks at things in a very different way from the way a university president or faculty would view them; for, a professor in a department looks usually to the students he has under him with a view to making them scholars in that department. The board does not look at them exactly in that way. It looks not only to the making of a scholar, but a useful man. The professor who only wants to make a scholar of the student is satisfied when he has made the scholar. The board of trustees will not be satisfied with that kind of a product from the university. Hence I say we have a different view. If the professor sends out from the university a man who is a scholar when he leaves the university, but is not a practical, strong man, a good member of the community and society, then the board of trustees, I think, ought to have the authority to go to that professor and say to him, "We want better material turned out, we want men rather than merely scholars. We want scholars and men combined." That is the view the trustees have and which professors do not always have. I think that can be adjusted. I appreciate a meeting of this kind, where we can exchange opinions.

MR. JAMES P. MUNROE
Trustee of Massachusetts Institute of Technology

Let me say a word in reference to questions that have not yet been touched upon. One was, as stated by Mr. Bullard, that the president who does not observe practically the line of democratic action, suggested by Professor Jastrow, would quickly disappear. What I tried to emphasize on Tuesday is, that the public mind is becoming wrongly educated, that it is learning to accept and even to demand the kind of college president that, to my mind, is undermining the academic career. It demands of a president that he shall be autocratic in order to "boom" the college. We must educate the public to understand that the president should be simply an interpreter—a sort of mouth-piece to his faculty. I have heard presidents of two great universities in this country say that the presidency would be comparatively an easy office if they could get rid of their pettyminded, meddling faculties.

Those same presidents, and others, offer as an excuse for their discourtesies to their fellow-workers, that the average faculty is not

fitted to take up these large questions—that it is too slow—and they maintain that it would take too much time to educate their faculties. But I think that Professor Jastrow, in his paper, has pointed out why faculties at present,—many of them,—are incompetent to treat broad questions in a broad way. It is because their lives are given, under the present system, to the consideration of limited and petty matters which neither fit nor lift their minds up to great educational problems. We have got to have reform in this direction,—reform not only for its own sake, but for the sake of lifting faculties up to a higher plane of administrative and educational thought.

MRS. NORMAN FREDERICK THOMPSON
Trustee of Wellesley College

I am in sympathy with the view expressed that there should be some connection between the faculty and the board of trustees aside from the president. The system Professor Jastrow indicates is fraught with some danger; but from the alumni of our institutions we have members of our board who are somewhat familiar with questions that arise in the management of affairs, and who might serve as a connecting link between faculty and board of trustees.

It would be well if a system could be put in practice whereby the faculty and trustees could consult and act upon certain questions without having their presentation colored by passing through the prism of the president's mind. A distinct advantage would thus be gained.

MRS. CARRIE T. ALEXANDER
Trustee of the University of Illinois

The board of trustees of the University of Illinois is elective and is unique in so far as women are eligible to membership. Three trustees, one of whom may be a woman, are elected every two years for a term of six years, and so far as I know this board is the only one of its kind.

As to the wisdom or usefulness of women on the board, there may be, and no doubt is, a diversity of opinion. As one of them you will pardon me when I present the favorable opinion.

While women may be governed by intuition rather than by reason, and (in the opinion of men) may rush in where angels fear to tread, their conclusions are often surprisingly wise. Moreover, whatever their conclusions may be, women will defend them in the face of great opposition, unmindful of effects upon their own interests; while men with, perhaps, the same conclusion reached by a series of deductions, being more politic, will shrug their shoulders and "let it go."

Women are much more economical and careful in the expenditure of money.

Several years experience as manager and owner of a street railway, where revenue was made up of "nickels" and expenses ran into dollars, may have warped my financial vision. However, service on the board, knowledge of economical administration of state institutions, to say nothing of organizations of women with women as the administrators of affairs, confirm my belief.

No doubt there is a reason for this. Their early training as children, when they are taught to make the most of their toys and personal belongings, together with later experience when money is doled out to them in small sums by an indulgent father, husband, or other male relative, has taught them how to make money go farther than any man could imagine. Fortunately or unfortunately, with self-supporting women on the increase, conditions will change.

My conception, therefore, of the duties of a trustee is to be ever watchful,—to conserve the best interest of the institution without entirely forgetting the taxpayer.

PROFESSOR JASTROW¹

I beg to remove the impression, which seems erroneously to have been conveyed, that I have advocated the abolition of the presidential office, and desire to have no other governing body in the university than the faculty. I have very explicitly stated that I believe the organization of the university in America to demand an official upon whom shall fall many of the responsibilities that now fall upon the president. I have, however, expressed my adherence to the opinion that faculty opinion be so strong, faculty consideration so authoritative, and faculty direction so universally acknowledged, that the president should have no desire to be anything more than the authorized exponent of that opinion (not of his personal one), and should never take any steps of any kind that do not bear the sanction of the faculty. I have maintained that the "administration" should be, first and foremost, the faculty, with a coördinate body to administer financial affairs in the board, and a recognized centralized representative in the president. Under such a system the present temper of the college president would be impossible; the present method of carrying measures by the president to the board without consultation of the faculty, equally so. I see no reason why the essential features and provisions for university administration should not be retained, but so entirely remodelled in spirit that the actual trend of administrative measures will be almost the opposite of what it now is.

¹In revising these notes, I am able to refer to an article by Professor Stevenson in the *Popular Science Monthly* for December, in which the only acceptable solution of the difficulty is maintained to be the abolition of the presidential office.

QUESTIONS REGARDING COLLEGE ADMINISTRATION*

DEAN CHARLES E. BESSEY

Trustee of Doane College

*Read, in the author's absence, by Professor S. A. Forbes, of the University of Illinois.

1. "What should be the real administrative body of a college or university, the faculty or the trustees?

"Should the trustees limit their functions to selecting a faculty and then vest in the latter the actual administration, or should the board itself undertake to administer the institution, either as a body or through its committees?"

In all matters pertaining to and involving the expenditure of money, the trustees should be the administrative body, but in educational matters the faculty and the trustees should both take action. In the latter case, the faculty should first act, and then submit their action to the trustees for approval. It is best that the trustees should delegate the arrangement of details to the faculty.

Since the power to control the expenditure of money must rest with the trustees, it follows that they and not the faculty have *final* control even in educational matters. It will help to clarify the situation if this fact be well understood at the outset. In all charters with which I am acquainted the trustees are made responsible for the financial management of the institution. In state colleges and universities, this responsibility is emphasized, and trustees are held strictly accountable for every item of expenditure. It is plain, therefore, that the *real* administrative body is the board of trustees, since by granting or withholding money they can promote or defeat any project. I am not saying what *should* be the real administrative body; I am merely reciting the facts as they exist, and as they must exist in all state universities, and most private ones as well.

Now, as a matter of expediency, all boards of trustees should at once delegate to the faculties the arrangement of all details of management, and then follow the sound business policy of non-interference in regard to all delegated powers. Elsewhere in society and in politics, there are numberless cases of such delegation of powers, and a successful practice of non-interference, and there is no good reason why it should not be equally feasible in college matters.

In all cases where questions of policy are concerned ultimately involving the expenditure of money, it is manifest that the trustees must take action. Thus, the establishment of new departments and courses of study, while the faculty is the only body capable of formulating the matter, it must be favorably acted upon by the trustees before it can receive the necessary financial support. It is clearly impracticable, and therefore impossible for any board of trustees to allow the faculty to pass finally upon matters which necessitate expenditures of money not yet authorized by the board itself.

A good working scheme is that which recognizes the powers and duties of both bodies. In general, the faculty takes the initiative, and proposes a plan which is then submitted to the trustees for their approval. In case of non-approval, the matter must of necessity be dropped for the present, or so modified as to meet with approval later. In case of approval, the trustees provide for the expense of the project, and should delegate the arrangement of details to the faculty as the body of experts who are supposed to know more about these matters than the members of the governing body. I have known of cases where a progressive board of trustees took the initiative, asking the faculty to prepare and present a plan for the consideration of the trustees. This is quite proper, and under the circumstances the only thing to do. I have, alas, known of cases where the trustees did not wait for faculty action, but themselves formulated the plan independently of the faculty. I cannot too strongly condemn such action, and while some faculties are no doubt much too slow and conservative, yet in the end the trustees would have done better to have requested previous consideration by the teaching body.

"2. Should the president of the institution be the sole advisory authority to the board of trustees, or should the other administrative officers, or the various faculties be consulted?"

In general, the president should be the adviser of the board of trustees as well as of the faculties, but in difficult or doubtful cases, the board should consult with faculty officers, or even with professors and instructors, but in general, the president should be the only one to carry petitions, applications, recommendations, etc., to the board.

In discussing this question, it is well first of all to agree upon the place of the president in the college. I have found not a little feeling on the part of professors that the president is a more or less high priced figure head, or even a troublesome hindrance to faculty plans, and I may as well confess that at times I have shared in views something like these. Yet I am convinced that the president is a necessary officer in every institution of learning where there are many professors and instructors at work in many departments, and having different duties. The millennium has not yet approached near enough for us to be able to conduct successfully a business as complex as that of a college without an executive head. The president is (or should be) the expert in the business of education who is the executor of the plans duly adopted by the trustees on the one hand and the faculty on the other. Moreover, there falls to him very naturally, the work of planning for improvements, some of which must go to the faculty for further development, while others should be laid before the trustees. Where the scope of the work of the president is fully understood by faculty, trustees and the president himself, there should be no jealousy or fear in regard to the rights and limits of any one. From his

position, the president is the natural adviser of trustees and faculty. It would soon result in confusion if trustees were to undertake the work of adviser, collectively or individually, for the professors, and in like manner, it would lead to confusion if every professor were to regard it as his duty to act the part of advisor to the trustees upon all kinds of questions as they arise. The morale of the institution is best maintained where suggestions of professors are first discussed in open faculty meetings, and the results transmitted to the president and trustees. Yet here, the fact that the president *is the president*, and not a mere clerk must be borne in mind, and he must not be required to lay before the trustees without comment any action of the faculty which he does not approve. In fact, every action of the faculty should be freely discussed *with* the president, and unless it receives the practically unanimous approval of the faculty, his disapproval should be final. I suggest that a veto power should be accorded the president, and also the power of reversing the veto by a three-fourths or four-fifths vote of all members of the faculty (not of a mere quorum). The troubles which have arisen between faculties and presidents have often been due to the fact that the proper relations have not been understood or observed.

I may say in passing, that in all institutions (possibly excepting the very small colleges where the president is also a professor with full work) the chief executive officer, whether called president or chancellor, should not be a voting member of the faculty. His votes should be wholly reserved for final approval or disapproval.

"3. Should the faculty be authorized to nominate men to the board for vacancies, or should that be done by the president or by committees or by members of the board?"

In some cases, a faculty should be asked by the board to make nomination, but in general, the nomination should be made by the president upon recommendations made by the professors in nearly allied departments. Where there are several faculties, the dean of the faculty in which the vacancy occurs, should have a voice in the recommendation, unless it be a minor one in the department.

That nominations should be made by the most competent body in the college, needs no argument. What is that most competent body? In the case of a vacancy in a minor position it is clear that the head professor is the one most competent to make a nomination, and he should be asked to do so. In case of a vacancy in the head professorship, the president should be the most competent to make a nomination, since it is his business to know who are the successful professors in many lines of work in the colleges of the country. It will help him to make a careful selection if he takes counsel of the head professors of allied departments, and the deans of the colleges or departments in which the vacancy occurs. I know of one case where an instructor

had made such a fine record as a teacher and investigator that the faculty took action unanimously recommending him to the trustees for election to a full professorship. This action of the faculty was ratified by the trustees with the happiest results, and I have never known a better appointment.

"4. How should trustees be selected? (a) By coöptation? (b) By the Alumni? (c) By outside authority?

1. In case of private institutions, by the church or other body?
2. In case of state institutions,
 - (a) Appointed by the Governor?
 - (b) Elected by the people?
 - (c) or *ex-officio*, e. g., Governor, Superintendent of Public Instruction, etc.?

(1.) *In private institutions: by election by the board itself for part of the trustees and by election by the alumni for the remainder.*

(2.) *In state institutions: by election by the people at large; i. e., all the people of the state to vote for candidates for all of the vacancies. This is far better than appointment by the governor, or election by the Legislature, or *ex-officio*. The latter is the worst of all.*

I have nothing further to say in regard to the election of trustees of private institutions. In state universities, appointment by the governor is certain, sooner or later, to be used for selfish or political purposes. Nearly every man elected to the governorship is under such obligations to certain men that he feels compelled to listen to their requests in regard to this or that appointment, and thus it happens that men become trustees for the purpose of carrying out the wishes of a particular politician. I know of a case where in this way a governor in a western state "packed" the board of trustees with appointees who were pledged to dismiss two professors who had offended certain politicians. And in due time, the pledge was carried out, and the professors summarily kicked out of the college.

The same objection does not hold with respect to those who are trustees *ex-officio*, for they are always elected for some other purpose. The objection to such trustees is that they have been selected on account of especial fitness for other duties, or political expediency, and they quite naturally look upon their trusteeship as entirely secondary, or as an opportunity of securing a little more "patronage." In one case, the trustee's duties are neglected; in the other, the office is too often made the occasion of political favoritism, or something worse.

Where trustees are elected "at large" for long terms of service, at one of the general elections, the best results have been reached. Of course, the trustees secured in this way are not either angels or educational experts, but they are usually honest men who honor their office. They were nominated in open state convention, and elected

by the votes of all the people in the state, so that they are not indebted to a small body of men for their positions. As a consequence, they are not particularly bound to any set of men and are free to act as they think best. In Nebraska, where this has been the method of electing the trustees of a state university for the past thirty years, there has never been a case of political appointment in the faculty, or a dismissal on account of political reasons. I have seen narrow party men elected to the board, but whose election left them so wholly free and unpledged that they forgot party lines when in board meetings. Even when the fusion party (Populist, Silver Republicans, and Democrats) elected a majority of the trustees in Nebraska, not a professor, not an instructor, not an employe was disturbed on account of his political affiliations. This was because these men came into office untrammeled and unpledged.

"5. Should the trustees assume entire control of the financial administration, or should they allow the faculties to have a representation also, by allowing them to submit a budget either by departments or as a whole?"

A budget should be prepared by the president or finance committee, based upon estimates and requests formally made by the heads of all the departments. With this budget before them, the trustees must then assume the financial responsibility of ordering expenditures.

As I have shown in discussing the first question, the trustees of the college actually control its expenditures. The professors know their own needs better than the trustees, in fact the latter may, and probably do have only a very general idea of departmental needs. It must be conceded, however, by every professor that the trustees know better than the professors what are the aggregate needs, as well as what are the available funds. Here is where the president may help both trustees and faculty, by making himself as fully acquainted as possible with the financial resources on the one hand, and the needs on the other. The business way of managing such a matter as this, is for the president to receive the estimates of the professors, and after conferences with members of the faculty on the one hand, and members of the board of trustees on the other, to propose such a budget as will be a fair compromise between requests and resources.

"6. Should the trustees, if they reserve the financial authority, undertake to determine the budget in all its details, or should they simply distribute by departments and leave it to the individual departments to make the detailed distribution?"

In providing for the expenses of departments, the details must be left to the heads of departments, who should make orders and purchases through the steward or proper purchasing officer of the college.

In the management of a department of any considerable size or complexity, it is quite impossible for the head professor to anticipate

every necessary item for a year in advance. Only in a general way can the expenditures be anticipated, and there will arise almost daily the need for something which could not have been anticipated by any foresight. I have found in my own experience in the management of a department, which extends over a period of nearly thirty-six years, that I can estimate pretty closely as to the aggregate expenditures necessary for the normal growth of the department, and I can even indicate fairly well how much will be necessary for this and that subdivision of the work, but it often happens that some change takes place in the amount of work which must be done which makes it necessary to quite materially increase the expenditures here, while decreasing them there. I consider it to be a sound policy to consult with the president in regard to plans for large expenditures, and especially for such as involve considerable expenditure for a series of years. In other words, it is wise not to begin the purchase of expensive annual distributions of specimens, or of particular sets of expensive machines or other apparatus, without some assurance of the continuance of sufficient annual appropriations. It ought not to be necessary to write down such business commonplaces as these, for these are the every day practice of business concerns the world over, and yet too often these very simple and obvious rules are ignored or wholly forgotten. We must remember that the business side of a college must be conducted on business principles, and these must be rigidly observed by both trustee and faculty.

"7. Should the trustees of all institutions, public and private alike, be required by law to file full financial statements with some public authority and publish the same?"

I am a believer in publicity, and favor the suggestion for both state and private colleges.

In state institutions, publicity is required by law. There is no valid reason why the same practice should not prevail in regard to private colleges and universities, and it would certainly tend to greater carefulness. Moreover, it would inspire greater confidence in the trustees on the part of the public were it known that all their actions were to be made public in an official manner.

"8. Should the alumni have some formally recognized place in the scheme of government of the institution? If so, what?

Give the alumni some representation on the board of trustees.

The growing practice in both state and private colleges of electing alumni to membership on the board of trustees, is to be commended. In the private institutions, this is a matter which can easily be regulated by a rule of the board itself, but in state institutions, since there can be no rule or law upon this point, all that can be done is for the alumni to be sufficiently active and influential to secure the nomina-

tion of graduates of the institution. In Nebraska this has given us one or more alumni on the board for many years.

"Should the student body have formal recognition in the scheme of government by being privileged to appoint representatives to any disciplinary or administrative body?"

The "student body" is a community in which the intelligent and active life of the individual is too short to make it available in any permanently helpful way. Freshmen are too timid; sophomores do not understand the college problems; juniors and seniors might render some help, but they soon leave college.

In my opinion, based upon fifteen years of experience with it, "student government," so-called, is impracticable in so far as permanent results are concerned. I took prominent part in a prolonged attempt to secure a condition in which the students could and would govern themselves. It was fairly successful only as long as the faculty watched every step taken by the student officers. When we relaxed our watchfulness the "government" fell into noxious desuetude.

In all this talk about the desirability of having the students take some part in the government of the college, there is the feeling that in some way wherever there is government it must be a representative government in order that individual rights may be secure, and the "consent of the governed" attained. Now, we may as well understand first as last that there are a great many places in even the most democratic society where "representation" is impracticable, and where the "governed" are not competent to have any voice in the government, or even if competent, do not want to be bothered about the matter. We cannot run railway trains or steamships with their hundreds of passengers by a committee of the passengers. When I go on board of either, I am too busy with my own affairs to be willing to "work my way" by taking part in the management. So too it is with the college boy. He expects us to manage things, himself included, and he rarely has time to turn to in order to take part in what is manifestly our own business, that is, the business of the faculty and the trustees.

"10. Is it possible to devise uniform methods of bookkeeping and statistics, so as to make comparisons more valuable?"

I should like to see greater uniformity in the bookkeeping of the colleges, and no doubt much improvement may be brought about by a proper committee.

This is a matter for the bookkeepers, and all that we need do here is to arrange that they and the president shall take up the matter.

Additional Remarks by Professor Forbes

I have been asked by the program committee of this conference to add to this paper, in the absence of its distinguished author, anything which may seem to me to be called for by way of discussion. I am pleased to be able to approve it most heartily in general, with some exceptions in details, however, one or two of which will presently be made.

Especially I approve it as exhibiting a symmetrical, well-balanced plan of a university organization, drawn by a man who has had much personal experience in all parts of it, who has lived virtually his whole life in an American university, and who is able, consequently, to look at it intelligently and fairly, from all points of view; and I would have you contrast it with that view of university organization, sometimes held up to us, which shows us a Brobdingnagian president, a common-sized board of trustees, and a Lilliputian faculty—a view evidently due to a radically wrong perspective, and which gives us no proper understanding of right relations and proportions.

What is the real, the vital, the essential work of a university, that for which alone it has been established and for which it is maintained, that for which all else exists and to which all else must be subordinated? And where is this work done and who are the real doers of it? It is the work of education and research, done in lecture-rooms and laboratories and libraries, and by the members of the university faculty. Whatever improves and strengthens this faculty, whatever best organizes its various abilities and makes them most effective for the university service, is good; whatever tends to weaken it, to suppress, to depress, to disorganize it, is bad. This is the test by which to try every proposition in university administration and development. And what is this faculty, and of whom is it composed? It is presumably—and such it should certainly be made—a body of strong capable, well-trained, well-organized men and women, themselves the picked product, the very flower, of the educational processes and institutions of which they have now become the active agents for the education of others. If they are not worthy and well developed and well trained, then the whole scheme of the higher education is a blunder, for they are its final outcome. It is because I believe in university education, and hence in the university faculty as its main and most important agent, that I am led to respectfully dissent from Dean Bessey's recommendation that the president should be given a veto power over deliberate and well-considered faculty action.

The president's position of advantage in most American universities, in that he speaks for the faculty in trustee meetings and for the trustees in faculty meetings; in that he powerfully influences, if he does not virtually control, appointment to the faculty itself, promotion in it, and removal from it; in that he stands at the center of university

intelligence, and is presumably gifted beyond the ordinary in diplomatic capacity, in a knowledge of human nature, and in the management of men, insures him all the power over faculty action which any executive officer—which any one man—ought to have; and if we add to this the fact that he is free to comment to the trustees on any action which the faculty may send up to trustee sessions, and that there is no one to defend the faculty position if he attacks it there, we shall see, I am sure, that this legislative body needs rather to be strengthened in the interests of its own efficiency than to be weakened still further by giving greater power over it to its own executive.

If this were the final session of this body, I should be tempted to ask the privilege of saying a few words on the university budget system, in the light of Dean Bessey's suggestions, but this subject will no doubt be fully covered under another topic on your program.

DISCUSSION

MR. HENRY H. HILTON
Trustee of Dartmouth College

Because of Dr. Bessey's high standing as an educator and his long experience, I have great respect for his opinion on all of these questions and I find myself in accord with many of his conclusions. Some I should modify and some, in my judgment, need emphasis.

Should the president be the sole advisory authority? From the standpoint of a business man, the answer to this question seems clear to me. Most large business enterprises to-day have their boards of directors but also their presidents, through whom all matters are brought to the attention of the boards. The president is held responsible for results and accountable if results are unsatisfactory. And so with any institution of learning. While it is to be assumed that the trustees will inform themselves through the faculty or otherwise, and while it is to be assumed that the successful president will advise with his faculty and endeavor to coöperate with them, yet he and he alone must be the head; and whenever a majority of the board lose confidence in the judgment of the president or when it becomes clear that affairs are going wrong, it is time to look for a new man for the position. I see no advantage in Dr. Bessey's suggestion that the president's veto should be overruled by a three-fourths' or four-fifths' vote of the faculty. A wise president would commonly yield to the views of a large majority of his faculty, but in special cases where he felt it essential that his views prevail his word should be final.

As to the publicity of financial statements, the wisdom of such action can hardly be emphasized too much. As regards all institutions in which the public have a direct interest, mismanagement and errors of judgment ultimately may assume proportions which mean disaster to the institution and its officers, and these might be antici-

pated and avoided were periodical public statements the practice. Instances come to mind where public school funds have been embezzled and college endowments seriously impaired by being wrongfully used in the payment of current expenses because incompetent or dishonest men were in charge and there was no accounting to anybody of the distribution of the money. Any man can profit by advice. No man is too honest for supervision.

Should the student body have formal recognition in the scheme of government? Dr. Bessey has the negative opinion and many will agree with him. Still I was reading only the other day a statement from Wellesley where student government has been in vogue for four years and they are enthusiastic over its results, and I know of other institutions where the students are participating more or less with different degrees of success. On the whole, I am inclined to believe that such participation has a place in most institutions.

Would uniform statistics be of assistance? As a business proposition this appeals to me as being sound. Whenever similar lines of work are being conducted in different parts of the country where the results sought for are much the same, statistics are invaluable. Comparison is sure to lead to a better general average, helping as it will to show weaknesses and emphasizing better methods.

What should be the relation of the alumni to the institution? The question appeals to me as vitally important. A college or university fails to attain its largest success without the sympathetic coöperation of faculty, president and alumni. The alumni will not, cannot sustain their interest without the opportunity for active participation in the affairs of the college, and general participation is only possible by alumni representation on the board of trustees. In addition to the regular duties of such trustees, it is my conception that they should see to it especially that the alumni scattered in various directions should be reached personally where it is possible, or by correspondence, made cognizant of changes and plans for developing the institution, and encouraged to make occasional pilgrimages to their *alma mater*. If this is done, their children are likely to follow in the footsteps of the parents. Such a constituency is peculiarly valuable because the boy or girl has an appreciation of conditions and a knowledge and sympathy with traditions which strengthen enthusiasm and kindle love, no small considerations in an undergraduate body. And besides the children, one's money, where there is money to give, will have a tendency to revert to the college where one obtained his preparation for life and his capacity for amassing wealth, and very properly. Apart from the importance of such a constituency *per se*, a geographically diversified constituency is recognized everywhere as a valuable leaven, and while any institution expects that the great majority of its student body will come from its own state or vicinity, the alumni if active

will help to enlarge the percentage from abroad. Then, too, that intangible something called "college spirit," which is hard to explain but which means much to the individual who understands the feeling, the joy of being part of a noble body of high minded, cultivated people, standing together like brothers or sisters, with a pride in the *alma mater* which acts as a stimulus to higher ideals,—such a spirit can be developed and intensified if the alumni are made to feel that they are needed and expected in the management of the institution. Unless the interest of the alumni is maintained, graduates drift away, acquire new interests, form new affiliations, send their children to other institutions, and in all probability the money goes where the children go.

Alumni representation is no longer an experiment. It has gradually come into vogue in the east and is at present practiced in most of the institutions of importance on the Atlantic seaboard and vicinity, and, so far as I have been able to ascertain, it is enthusiastically endorsed by all who are interested and is accomplishing the desired results. I look for the general adoption of the plan among the remaining institutions in the East and the non-state colleges of the West.

It seems to me that what is good for these private institutions in this regard should be equally applicable to the state universities. Such institutions I suppose are desirous of reaching beyond the borders of their states for their attendance, especially among the children of the alumni; and in matter of bequests, while their principal support is expected to come from state funds, I have not observed that any bequests to state institutions are being declined, and I look for such bequests to grow in number. Alumni representatives on the board would have their beneficial influence in these and other matters. In some instances which I recall state institutions have suffered seriously because their affairs have gotten into state politics, a danger that can never wholly disappear where the entire body of trustees are elected by popular vote or appointed by the governor. As a resident of Illinois interested in the continued rapid progress of this institution, I should welcome such a change in the law, if such were possible, that the University of Illinois might lead her sister universities in this movement for alumni representation elected by the alumni; and even if the law remains unchanged, I shall hope for such active interest on the part of the alumni as to insure alumni representation on the board to the extent of several members.

STATE SUPERVISION OF ENDOWMENT FUNDS

MR. J. P. LIPPINCOTT

Trustee of Illinois College

Should the trustees of all institutions, public and private alike, be required by law to file full financial statements with some public authority and publish the same? To my mind the answer is, Yes.

Why should the people of the State of Illinois enact a law requiring the trustees of private institutions to make report of their expenditures and publish the same? They act without compensation and often at considerable expense of time, money and convenience. To justify such a law, there should be pointed out some characteristic of human nature that is deep seated and ungovernable, save under the pressure of necessity of meeting the animadversion of every possible critic. There should be given some reason as broad, as comprehensive, and as far seeing as the highest statesmanship can give for the enactment of any law; some reason which honorable, conscientious, benevolent men can admit to be good without seeming to lessen their own self respect. It will be the effort of this paper to point out such a characteristic of human nature; to give a reason that is a fundamental and, hence, answering all the very severe requirements just stated.

Let me first make the very broad assertion that, in my opinion, every private endowed college in the State of Illinois that has been in existence twenty years or more, would to-day have from two to ten times its present available endowment, had such a law, with appropriate sanctions, been in force during the period of its existence. In modification of this assertion let me say that I do not refer to institutions which have a foster father, ever ready to supply funds; but to those institutions dependent upon such occasional gifts as may come from benevolently inclined persons who at the same time do not feel the responsibility of foster fathers.

A lawyer, in whose presence I may well rise and stand uncovered out of respect for his years, learning, and influence, made the statement in my hearing that the institution is a trust to be carried on with the available funds as best it can and that it is the duty of the trustees to keep the institution going while the funds last, depending upon benevolently disposed people of wealth to make further contributions to the endowment fund and thus send the institution forward to the next generation. Other abler lawyers than the speaker have practically adopted this view. They overlook the fact that the same trustees have separate trusts, as distinct in the attendant obligations as though the separate trusts were given to distinct boards; that the institutional life is one trust, while the principal of the endowment fund is a distinct trust. They have no right to consume the body of one trust in order to keep the other alive.

Another lawyer said to the speaker: "I did not suppose the trustees were bound to preserve the endowment fund. I supposed it was just money given to the college and they could do what they pleased with it." And I must take off my hat to him in recognition of his greater success. As illustrating the practical working of this view, let me mention an institution in this State, not my own, however, which I am informed has now only half the endowment which it had two years ago. I am informed that the fund has been directly drawn upon for current expenses. This institution has a good lawyer on its board of trustees, if I am correctly informed. And yet, the supreme court of this state announced, in deciding a case to which that institution was a party, that if the funds were insufficient to produce an income with which the school could be conducted, it was the duty of the trustees to let the fund accumulate until it should be sufficient. Views similarly mistaken, arising from a somewhat careless assumption, without investigation, may be met in every body of men concerning subjects that are to them side issues to their regular business. And such mistaken views have to do with, but do not constitute, the characteristic of human nature, the broad and comprehensive reason for the proposed law, of which we are in search.

There is a tendency in human nature separating the human family into two classes, the one loyal to an idea or principle, the other to a person; let us point to the workings of this tendency in the practical affairs of to-day. Turn where you will in the affairs of man and you will find the personal embodiment of a will and purpose much more potent in accomplishing practical results than any principle which ought to be adhered to. Said a very intelligent and able financier, then but not now on the same board with me; "We cannot refuse to follow the president's recommendations unless we are ready to break with him." I did not wish to break with the president, but a certain recommendation seemed to me to be bad policy for the college. I was for discussing the matter and, if in the judgment of the board the movement was unwise, it seemed to me that it should not be made; but I found that I was speaking out in a meeting where I was not expected to interrupt. And so you will discern, if you notice, that in this busy day autocratic leadership is the rule.

The trustees of our colleges are simply men, very high-minded and honorable men, in the main, but men who, in general, will simply act out their natures. If there was always a monitor present to admonish them of their duty and obligation, to point out a principle absolutely binding upon their consciences, they would rise from following the lead of persons to independent action upon principle. But the principle of which they are not frequently admonished becomes shadowy and lost sight of. They give themselves to the personal leadership of the current administration. They are hoping for

some gift or gifts to place the institution on a solid foundation and make spasmodic efforts to accomplish that desideratum. In the mean time the present necessities of the faculty require a slight deficit and with the same illusive hope that defeats so many in the quest of fortune, they try to keep things going, to keep up appearances, and are deaf and blind to the legitimate consequences. If very technical, they may formally borrow from the endowment fund and execute the note of the institution therefor, or may resort to some other subterfuge, just temporarily. Time passes. The personnel of the board changes. The administration, it may be, changes. The persons now carrying on the institution are not those who created the indebtedness and are not responsible for it. The whole thing belongs to the past, and may as well be charged out. It is charged out. Then the process repeats itself,—*itself*, mind you! With human nature as it is, this process is almost as certain to be repeated as are the seasons to follow in due course. The nearness of the persons who want the things done that can be done only by accumulating an indebtedness, eventually to be paid out of the principal fund, the remoteness of the obligation not to incur this indebtedness, except upon the individual responsibility of the persons incurring it, the instinctive fealty to persons rather than principles, all go to make it certain that the college will be kept going while the principal of the endowment fund lasts. These make it certain, also, that from time to time the expenses will exceed the income of the institution. Only while you have an administration able to procure funds in excess of expenditures will the endowment fund grow; and then it will be a changing fund, the new coming in more rapidly than the old goes out. These general statements are made rather than to do the unpleasant thing. It would be an ungracious thing to give statistics at such a gathering. I am sure the trustees of every private college here represented can acknowledge that in a general way these statements may be true. Here again is loyalty to persons greater than loyalty to principle. Who wants to stir up troubles of this sort? Few care to do so ungracious a thing. Yet, would not the courts hold trustees responsible as for a breach of trust, when they thus consume the body of their trust?

My voice is for a statute requiring the trustees of each institution, having an endowment fund, to give an annual statement of receipts and expenditures under each head to be filed with the appropriate public officer and to be published. I would suggest, further, that the alumni association, whether incorporated or not, of each institution have the right from time to time to inspect, by appropriate committee, the condition of the investments of the endowment fund of their respective institutions. The statute should make the trustees, or administration, personally liable for every misuse of the principal of the endowment fund. If any, familiar with the law of trusts,

smile at thus restating in statute form what is really, in the main, the law already, it may be said that few know it to be the law and fewer still, who know the law, understand its application to, or are interested in, a particular institution.

Objection may be made to requiring private institutions to make their affairs public. Every private institution is very anxious to be in the public eye with its best dress on. It will have a wholesome effect if, seen in its working clothes, the working clothes shall be found to be in good condition. But they are not private institutions in this sense. They are institutions chartered by the legislature and authorized to accept funds in trust for endowment purposes. They hold in their custody funds dedicated to the endowment of the institutions, the principal for investment in interest bearing securities, the income for expenditure in the cause of education, dedicated, it may be, by persons long since dead. In this busy world there is no one to see that the trustees are faithful to their trust unless the law provides some one. Moreover, the state itself is not dealing fairly with the small colleges when it maintains, at public expense, a great institution to do what the small colleges can do better. Some great mind, such as Mr. Webster displayed in the Dartmouth College case, should demonstrate what is simply fact, that in spirit, the maintaining of this institution for undergraduate work is in violation of the implied contract with the founders of these private chartered institutions; that the state would foster and not undermine them. Ordinary good faith requires that the legislature shall from time to time throw about these institutions, and the funds committed to them, every additional safeguard which experience shows to be necessary and wise.

Let it be known that the funds will be preserved and will remain an everlasting influence, and you will have removed the great obstacle to many a generous impulse. The fear that the endowment will not be permanent deters many.

UNIVERSITY INVESTMENTS AND ACCOUNTING

MR. WALLACE HECKMAN

Counsel and Business Manager of the University of Chicago

So far as the investments of an institution are in real estate, sure to constitute a substantial and increasing part, the accounting sustains an intimate relation to the investment itself, and is an important factor in the ultimate result of advantage or disappointment. In these accounts the ledger page contains columns which will enable the bookkeeper to draw off at any instant a statement of the special items entering into the expense account, for the purpose of comparison with each other, and the enforcement in all of the economies realized in any particular case; for instance, items of taxes, insurance, building

repairs, heating apparatus, machinery, elevators, electric light, water, electrical, janitors' and engineers' supplies, decorating, sprinkling, hauling ashes and garbage, fuel, light, wages of engineers and elevator-men, and miscellaneous charges. As each item of expenditure is audited on the voucher check it falls into its class and into its place on the ledger page, enabling the agent in charge, or business manager, or finance committee, from a glance at the ledger, or a statement easily drawn from it, to note unusual expenditures or unfavorable comparisons of similar items. Similarly the rental register shows upon a single page the property, the tenant, the rent for the several months, —a glance disclosing whether the tenant is in arrears. This fragment of the accounting facilitates economy, detects waste, prevents arrearage and loss. The multitudinous accounts upon the books with registrars, colleges, superintendents of commons, agents, temporary advances, university press, book stores, subsidy books, budgets, and the long list of special endowment funds present problems peculiar to these institutions.

Commercial and mercantile establishments desire to know at a glance each day the actual value of their plant, their property, equipment, available cash, etc. With the institution this is altogether different. Its buildings and grounds, its books, scientific apparatus, and furniture, may constitute an aggregate cost of a vast sum. Their realizable value might be but a meager fraction of it. This is a matter of indifference to the finance committee. A statement each month, therefore, such as banks and business houses make, would have no significance or value here. The monthly balance sheet shows the permanent investments in the buildings, grounds, books, apparatus, furniture, and capital used in current assets. Beyond this the problem is to show in the briefest and most condensed form, classified so as to make clear the condition of the special endowment accounts, the amount of cash on hand for investment or with agents, registrars, managers, and temporary advances, classified and grouped; investments in the press, laboratory supplies, subsidy books, collections, income accrued, accounts due and payable; in other words, items of cash and items not cash, similarly classified and the aggregate shown. Next, there must be shown the amount of unexpended budget items listed and aggregated. The analysis of the condensed balance sheet divides its items into capital items and cash items by which it can be seen at a glance the balance of cash, or any need at any particular date, to see what relation they bear to the total expenditures of the year in order to be certain that the expenditures do not exceed the budget. This involves an examination of the amount of revenue derived and that expected for the balance of the year, and a comparison should be so made as to ascertain whether expenditures in excess of

those provided for have been made so that the variation, if any, shall be provided for or prevented.

The services of expert accountants are required to audit these intricate and complicated accounts, but in addition to the prevention of errors or irregularities in any of these various sets of books and accounts, he renders the invaluable service of seeing to it that the best methods are adopted in the various departments; in addition to this, his clear statement supplements that of the university auditor in making plain the financial situation.

The investment and management of the funds and property constituting the endowments of adequate, modern, educational institutions differs in a few particulars from the like service in connection with the great insurance, guarantee, and saving concerns. To a greater extent than either of the latter, however, this investor is indifferent to the quality of quick merchantability of its assets. If he has advantages over such concerns, they, as well as the university, have advantages over the broker, the merchants, and the ordinary investors in securities. The quality of easy and quick realization is so attractive to the broker and the temporary and spasmodic investor in stocks and bonds, that the bonds of great railway corporations, and similar concerns, which are listed on the great exchanges, the market value of which is daily published in the newspapers and bulletins, are such as to enhance their value and therefore to reduce the income upon them to three and one-half or even three per cent., a rate which would require a vast endowment for an ordinary institution. The contingencies of business, the equipment of speculations or emergencies of trade, do not exist in the case of the university. The security must be unquestionably adequate and of a permanent character. The particular holding may be large in amount or may extend for a long period. The university investor adopts the policy of offering considerable sums in single holdings for long periods of time at the lowest possible expense to the borrower, but securing the higher rate of interest accorded to this class of investments. Even then he finds himself compelled to carry considerable sums in railway and other bonds. He may do this to keep his funds invested, since these are always to be had at the market rate, but, in the second place, he may do it for the purpose of having in hand convertible funds with which to take advantage of opportunities for securing investments particularly adapted to his need, since, if he sifts and invests carefully from every standpoint, covering the long period of time the investment is to run, those which will pass his test are not at all times to be had.

Even in the general class above indicated, the policy of the institution will be likely to discriminate along cautious lines and confine itself within well considered limits which observation and experience, more or less serious, have established.

Agricultural lands have been found to constitute one of the safest securities, because the exercise of expert knowledge and economy in the placing of these investments, collection of interest, supervision, and, if necessary, foreclosure suggests allotments to restricted, pre-determined territories. Structural farm improvements, while valued highly by the owners, the lender largely ignores, since the long term loan makes difficult the guarantee of their maintenance, while the responsibility connected with insurance and detail involved in it deprives the latter of any special interest. On the other hand, in loans in cities, vacant land is often wholly disregarded by the university investor as too speculative in character. Here the structural improvement and the strategic location constitute the substantial factor. In the determination of the latter qualities the nicest discrimination and the keenest farsightedness are required in the placing of the substantial sums loaned; since the active city, which is the one he seeks, is constantly changing its center of trade by the trend of new improvements, by the recasting of municipal transportation, by mere growth itself, breaking away from old locations considered to be the commercial centers permanently established. The constant menace of change is such as to require the constant vigilance of the investor in mortgages or in fees, and even courage at times to part with property at a loss which insidious changes are evidently reducing in value and must continue to reduce. The policy of secondary regard to farm improvements on the one hand, and special attention to buildings and location in the city investments on the other, rests on the same reasoning. The substantial value in the former is the soil, in the latter the structural improvement in the commercial, mercantile, and manufacturing center, each yielding a revenue of comparatively slight variation, each able to be relied on even in adverse periods of subsidence in values, adding thereby also to the ultimate realization when normal conditions return. To some investors the profits accruing from foreclosure of loans, which occur with almost periodically regularity, have attractions, and fortunes have indeed been made and other fortunes largely increased, by the feature of that class of investments; but such as adopt it are not likely to succeed in it in the more speculative class of improvements, namely, on unimproved property or improved property not of the first order, and therefore, subject to the full effect of depressions. The policy of deriving profit through foreclosures has little, if any, attraction for a university.

If mistakes happen to be made, excessive loans placed, or inferior property acquired by foreclosure, it goes without saying that sentiment in this particular as to what the property has cost the institution, or what value the donor placed upon it, should have no weight. Indeed the consideration of sentiment should have no place in connection with these investments, except to preclude loans to members

of faculties, or officers, or trustees, or possibly alumni, when sentiment might later interfere with the course to be pursued, if the investment shall prove unfortunate, and for the additional reason that such loans are likely to be extended from time to time too easily and until the latter event is at hand.

Prudence will probably suggest a division of investments into real estate fees, loans, and bonds. Stocks are regarded, without wisdom, as of too speculative a character, although some preferred stocks sustain to the property practically the relation of bonds.

While the increase in the volume of currency is going on, fifty per cent being added to it within a period of ten years, that is, from \$21 per capita to \$32, while the volume of gold is being added to by the enormous output of our own West, South Africa, and Klondyke, and the industries incident to this, and to agricultural prosperity, so great as to double the price of our corn belt lands, as well as that large fertile tract parallelling it at the North, devoted to more diversified pursuits and products, the income on the bonds, mortgages, and secured fees, is steadfastly diminishing. This is true, in the face of the admission on all hands that the salaries of the staffs of these institutions, instead of being reduced, ought to be and must be increased, in mere justice to the importance of their work to the community, and the increased demands constantly being made on them for added qualifications, which again must be supplemented by provision for better and larger equipments, laboratories, and laboratory supplies, and more books and library facilities. In addition to this a careful study of the entire situation discloses, not as a benevolence aside from the university's educational purposes, but as an intimate and pressing necessity in the execution of that purpose, the desirability of a studied and wisely devised system of faculty pensions.

The income for all this from a rapidly falling rate on the ordinary listed securities, whose attractiveness is their quick merchantability, forces us to make the most of any particular advantage we can fairly claim, and suggests aggressive activity on the part of friends of education to see to it that these advantages are availed of. For instance, every facility, it would seem, ought to be afforded by counties, cities, school districts, and other municipalities to educational institutions to secure municipal and other public bonds. The number of trustees of these institutions is necessarily small and generally those must be chosen who reside conveniently near the institution and can attend the meetings of the board. However, committees of men of the highest standing in all communities ought to be secured who could, without undue sacrifice of time, render the important service to these institutions of seeing to it that they have every advantage in securing public and other appropriate choice investments to which their relation to the public entitles them. For all these loyal and useful ends

I should like at this first, and I hope not the last, conference of college and university trustees to suggest the inquiry whether the time has not arrived when our universities should join in some form of coöperation for the establishment of a central organization for the purpose of acquiring through the most expert and best devised courses and methods those securities which by their character, their safety and income, are adapted to our needs. In this larger way may be secured safety and rate impossible in any diverse piece-meal and smaller way. This would constitute a clearing house, if you please, for choice, large, long-time investments, where an institution can secure those with the best guarantee and, on the other hand, needing to cash them for building and other purposes, in turn dispose of them to like institutions needing the investment.

There will be always among business men some who recognize that money getting is an incident and not an end; and men of wealth who are not satisfied with the idle conventional display of it, earnestly devoted to the cause of education, and alive to its importance, who consider that their best service will be to pursue with undivided aim its acquisition, and in the end through gifts or final bequest, give evidence of this large purpose. But there are others among the foremost of our great merchants, manufacturers, and financiers, builders of fortunes, particularly those who have had university advantages and consequent university ideals—and the number is increasing as educational advantages increase—who regard these matters as worthy of their best attention in their most active years, a field of the very highest usefulness, particularly under our form of society and system of government; who regard it as broadening their horizons, and as adding to their own lives a most wholesome and enjoyable interest; who are willing to devote and who do steadfastly devote a substantial fraction of their time to it; who attend the monthly meetings of boards of trustees with the same scrupulous regularity and exactitude with which they keep their business engagements in their great commercial and mercantile concerns, their banks, and trust companies, and bring to bear therein the same ability, vigilance, and industry which have made them important and their own enterprises successful.

A central committee of the best of these strong, experienced men from each university board constituting a central organization and the instrument of the universities represented, ought to give to all the advantages possessed by any one and the ability for service of each multiplied by the weight of the combination. A compact body of such men could work out, execute and maintain policies of incalculable advantage in the conducting of this business, now grown by the aggregate of university endowments, and the twenty millions lately devoted to general college and university uses, on lines so convincingly well conceived as to be sure to attract other large, similar donations.

in proportions heretofore unthought of, and of an intimate public interest second to none. With this central committee or organization the active non-resident committee before mentioned could be in correspondence and render that distinct and special service which their influence in their widely separated localities would command.

While in the educational departments of our institutions strong bodies of men of disciplined intelligence are intently pursuing their interesting and varied work, extending in new directions, retreating from experimental back to methods tested by experience, inspiring activity in their diversified departments of research, and in the examination, enjoyment and creation of literatures, studies, arts, sciences, bestowing upon the throng of youth who come and go, the priceless possession of "a knowledge of the utilities, the amenities, and the consolation of books," it is and always must be the gratification of other men to see to it that this noble and enjoyable work has the full support which the funds bestowed by unselfish and farsighted founders can afford.

The spirited teams of powerful millions, harnessed by generous donors, to endowed education and research, the foremost vehicle in the triumphal procession of enlightened achievement, ought to be encouraged, urged even, to the exercise of their full strength, guided by a farsighted vigilance which shall foil, surprise, and avert disaster, and hold them steadfast to their perpetual service in the grip of tested methods and business policies not to be unclinched.

NEED OF BUSINESS METHODS IN OUR UNIVERSITIES

MR. WILLIAM A. DYCHE

Business Manager of Northwestern University

The several topics for discussion at this conference are full of interest and worthy of consideration. It is likely that a marked difference of opinion will be developed in regard to many of them. They cannot be decided by debate. Each college, or university must, to a certain extent, work out its own scheme; yet public discussion by trustees of the conditions confronting them and comparison of ideas will be beneficial.

The relation of faculty and trustees in regard to finances is most interesting. It seems to me that the faculty, through the president and heads of departments, should have a large part in planning educational expenditures. It seems equally clear that the trustees should have entire charge of the business management, caring for the property making investments, etc.

There is one point, however, where there can be no room for differing opinions, namely: that the methods used in our business offices should be the best. This is so evident that there should be no necessity

to discuss it; yet there is a great need of publicity on this point. Many of us undoubtedly know of institutions, other than great life insurance companies, handling trust funds in which the loosest customs prevail. I remember reading some years ago a strong article on this subject published in the *Outlook*. I wish every trustee might read it. It was a stirring rebuke to the laxity and carelessness which its author claimed existed in the business offices of many of our colleges and universities. I wish I had it now; it presented the matter so forcefully that I would like to quote from it. The author cited numerous instances of defalcations in our colleges and in the trust societies of our churches. I happen to have fairly reliable information of two cases that will serve to emphasize the need of correct business methods on the part of those to whom a trust has been committed.

The first is that of a society engaged in a great humanitarian work. It is fostered by a religious denomination; its representatives are appealing every day in the year to the American public for donations; it receives and disburses annually hundreds of thousands of dollars; it has endowments; it offers favorable terms for annuities; it is a trust society in the broadest sense of the word. Yet the officers of this society and the trustees who have the management of its vast interests have for years concealed a deficit or shortage in one class of its trust funds closely approximating \$100,000, and the record of this shortage is kept outside of the books on a vest-pocket memorandum; its published reports are misleading. I am not aware whether this shortage is the result of a defalcation or mismanagement. Until within three years the trustees of this great society have never realized the necessity of having their books audited by non-interested experts. About that time a new trustee was elected. He saw that the financial reports were not satisfactory and that the officers had great trouble in preparing them. He suggested that if the books were properly systematized, there would be no difficulty in making accurate and satisfactory reports. A public accountant was called in and given instructions to make an exhaustive audit and suggest better methods. In due time he discovered the shortage above referred to and proceeded to make it show up on the books. The old trustees were alarmed; they urged him to overlook it and not to refer to it in his report. He declined; they dismissed him. From that day to this these officers continue to conceal the shortage, and the reverend trustees, high in the councils of a great church, are too cowardly to publish the truth or even correct their books.

The other illustration is that of a comparatively small educational institution. It was founded for a particular purpose. Its kind of work is not expensive. Its endowment, when considered with reference to its need, is very large. Its trustees employ no salaried official to look after its business. For fifteen years, more or less, one of their number, who

had a reputation for business sagacity and enjoyed the confidence of his associates, has acted as their business agent, managing the property, looking after the endowment, collecting the income, and paying the bills. This institution, I am told, has not published a financial report for years. Its trustees have a general idea of the value of its property, but in reality little definite information. However, some of them know and have known for years that their associate sometimes deposits the funds of their institution to the credit of his personal bank account, and that its bills are sometimes paid with his personal check, and that frequently he neglects to pay them until long past due. When a temporary loan was needed, he was accustomed to borrow in its name without specific authority from his associates. He writes up his books when the spirit moves him, and that is very rarely. Apparently he thinks all necessary records can be kept on the stub end of his check book. It is reported that the trustees are beginning to grow tired of his carelessness and in a most peaceable and politic way are intimating to him the necessity of a more accurate system of accounting. They are really disturbed, but hesitate to take radical action, fearing to wound the feelings of their associate. In this case I doubt if the institution has met with any loss other than that which must of necessity follow such carelessness.

The thing that impresses me most is that we trustees, in accepting office, fail to realize that we are accepting a great responsibility. We may have visionary ideas, or no ideas at all, about the educational problems our presidents continually hurl at us. We cannot be blamed very much if we make mistakes about them. But there is no excuse for us if we tolerate dangerous customs and slipshod methods in the business offices of our respective institutions. We cannot be expected to give much time to details; hence we should learn from experts if our accounting systems are adequate and from frequent audits and examinations by, non-interested public accountants if our books are right and if our published reports can be verified by our books. Anything short of this is neglect of duty.

The best and most approved methods of handling our property, of making and taking care of investments, of looking after all the material interests of our institutions are the most economical. When any trustee opposes changes which will make these things possible, he is assuming grave responsibility.

I have been asked to outline an accounting system suitable for a university. This is a difficult task. I am not an accountant. Nothing in the world so staggers me as a column of figures. Though I do not know how to do the books, I know what the books ought to do for me. I will offer only a few simple suggestions.

A well planned system of accounting is not only essential for the proper management of a university, but it helps to make proper

management easy. A set of books may be accurate but not satisfactory, in that it does not yield information quickly and clearly. The satisfactory set of books must be accurate and readily yield all needed information—grinding it out, as it were, month by month. For instance, our books should be so systematized that at the close of the first month's business of the fiscal year a few hours' labor will result in a report or reports showing all the receipts and expenditures of each and every department in the university. These reports should also compare the receipts and expenditures with the estimates in the annual budget. Each of the general officers of the university should have the reports covering all departments; thus they can by a glance keep in touch with the financial condition of the whole institution. The dean, or executive officer, of each department should have a copy of that report referring to his own work. At the end of the second month similar reports should be sent out showing the total for the first two months of the fiscal year. Thus the reports for the twelfth month will be a complete record of all the cash transactions of the institution for the year. Reports of this kind are an invaluable aid. They constitute a safeguard in checking overdrafts on appropriations and misuse of funds. A series of these reports, covering several years, furnishes many valuable hints in the preparation of annual budgets. It costs but little to get out such reports, when once the system has been established. Having learned by experience their great value I would never attempt to get along without them. If you do not follow this plan I urge you to give it a trial.

I once heard a trustee, noted for his unselfish devotion to his university, lament that he could never tell from its published reports, or even from its books, whether it was living within its income or not. He feared that the annual operating expenses were gradually eating into the endowment. This is a frequent experience. It is due to the failure of the accounting office to distinguish between revenue and expenses, and receipts and payments on other accounts. If in our set of books we draw a sharp line between revenue and other receipts, and a like distinction in reference to expenses, then we can always tell whether our institution is living within its income or eating into its endowment. It is very easy to do this. Yet the average system of college accounting to which my attention has been called breaks down completely at this vital point.

Our records of assets and liabilities should be so clear and so classified that statements can be drawn from them at any time, showing how they are being changed by the cash transactions of a given period. The financial management of a corporation must continually compare its assets and liabilities of to-day with those of a year ago. If we, in college work, are to know how our institutions are getting on, we also must do this. If our books are in good form the necessary infor-

mation can be gotten out of them quickly and with ease. I once knew of a university owning several hundred different pieces of real estate worth nearly five million dollars. The total value of this land was entered on its books, but there was no real estate sub-ledger or any other accurate record of the individual pieces which made up the total. Once an unusually diligent clerk made up a typewritten statement showing these holdings. For years this was the official record of this great amount of property.

Our books, our record, our vouchers—all things in our business offices, should be kept so that the auditor can work with them without undue labor. We trustees, of course, should never fail to have our business offices audited.

I believe the auditor should be a public accountant who is not afraid to criticise and to report bluntly on what he finds. It happens usually that our offices are audited by a trustee or a committee of trustees whose work is merely perfunctory; this is a dangerous custom. I have pleasure, however, at this point, in stating that I know of one trustee auditor, working gratuitously, who during the past year has examined all the books and records in the business office of a large university as carefully, as thoroughly, as skillfully, as any paid accountant could have done. But such service is rare. These trustee auditors usually examine the payments with great care; if the record of receipts on the cash-book adds up all right, they assume that it accounts for everything and go away satisfied. It is at this point that there is room for great danger, for it is so easy not to enter all the receipts; hence this system of ours must devise some plan which will aid the auditor in finding out if all the money which ought to have been received has been entered on the books, and if not, the reason why. This can be done almost to a certainty.

Again, no collecting officer should ever be allowed to receive even one cent without giving a receipt for it, and he should be required to keep a carbon duplicate of this receipt. These duplicates will be of great assistance in checking. A careful method of daily checking between the office which issues bills for tuition and the office where they are paid should be enforced. These bills should be made out so that an analysis of tuition receipts can be made up showing a proper classification.

No collecting officer should ever be the disbursing officer.

Our different colleges and universities do not follow a uniform plan in regard to annual financial reports. Some of the wealthiest of them do not publish any; or, at least, do not give them general circulation. Others send them to whomsoever asks for them. These reports, however, as a rule are uniform in one respect, namely: their lack of clearness, and the success with which they conceal what they are supposed to make plain.

President Eliot of Harvard was, I am told, the first educator who gave attention to the business office of his university. Under his direction the reports of Harvard University are models. You can learn anything you wish to know about the finances of Harvard by reading the annual report of its treasurer. Such a report, showing a long list of investments of endowment funds, with the interest earning of this year compared with that of the preceding year, inspires confidence. The prospective donor who reads one of Harvard's reports will never be afraid to trust it with his money.

I believe it good policy to issue full and complete reports concealing nothing. We are appealing to the public for gifts; we should let the public know how we take care of them.

I doubt if our state governments have any right to exercise supervision over the business management of our colleges and universities. I sometimes wish they could do so. Practically every university enjoys special privileges from its state government in the form of a greater or less exemption from taxation. Even though the state may not have the power to demand it, we trustees owe it to ourselves to prove that we are not abusing these grants, and that the trust funds which we are collecting by virtue of the power conferred by our charters are not stolen or mismanaged. The least we can do is to demonstrate to the state which has granted us the right to exist, and to the generous public whose donations make our existence possible, that we are surrounding our business interests with every reasonable safeguard.

I hope this conference will result in impressing upon the conscience of trustees that it is a duty they owe to themselves and the public so to manage their trusts that any publicity given their affairs will never be embarrassing to them or result in loss of public confidence in their institutions. The simplest way to do this is now and then to throw our business offices open to an examination by public accountants and to study well the advice they give us.

The suggestions of this paper are only a few of the many in my mind, and I am sure, of the many you are thinking of. I shall offer only one more. When on the witness stand in the insurance investigation now being made in New York, Mr. Jacob H. Schiff, the eminent financier, exclaimed—"It is not good for any corporation to be at the mercy of one man." It is very natural for us to fall into the habit of depending upon one man. This is one of the greatest dangers which confronts us. Whenever anything goes wrong in handling trust funds, one man power is usually the explanation. So, therefore, let me urge on you to see that your institution is never placed at the mercy of one man.

As I close this paper it seems only fitting to say a word about the new president of the University of Illinois. I have known of him since he was principal of the high school in Evanston in 1877. During his

short term as president of Northwestern University I was intimately associated with him. He gave us great service; but because of its brief term some of the best things he did for us will never be recognized as the result of his work. While at Northwestern, President James displayed evidence of leadership in his work with the various faculties of the University, and soon it became clear that he understood the needs of the institution and its possibilities better than many who had been studying them for years. He gained the confidence and loyal support of every faculty; he completed the work which his predecessor, Henry Wade Rogers, began,—of making each of the colleges feel that it was a real part of the University; he developed the true university spirit. So great was the confidence in his advice and generalship that men, old in service as instructors in law and medicine, sought his opinion and often yielded their judgment to his. This was true of every department of the University.

I have never known anyone to surpass him in the gift of brief, clear and forceful statement. This is one of his strongest qualities. In private and on the rostrum he speaks quietly but with convincing force; in debate he is vigorous, but, if opposed, so fair that he never gives offense. He is of judicial mind, and though advocating some policy he would have the University adopt, he always pointed out its dangers as well as its advantages; he never misled. These qualities won for him our confidence.

There is no room for selfishness among universities,—they are all working for a common end. Their true interests never clash. We, of Northwestern, are gratified that our state university has secured as its President one of the greatest leaders in the educational world. We look for him to do great things for it and the State. We hope it will become under his leadership, the strongest and most useful university of its type in the country. President James is only content when he feels that the institution he serves is "getting there." He wants it to "get there" as the twentieth century limited gets to New York. So we urge the alumni, faculties and trustees of the University of Illinois to keep pace with him and make this institution a great power in the State and country at large. Organize your alumni, send them to the legislature. You will then get all the appropriations you need. The other friends of higher education will help you in your good purposes. President James has a legion of friends at Northwestern University. They unite in wishing him and the University he serves, "God-speed."

DISCUSSION

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While I do not come before you this afternoon bearing official credentials from either the "Illinois Society of Certified Public Accounts" or from the national body known as the "American Association of Public Accountants," I venture to believe that it is my duty, as it is certainly my pleasure, to refer briefly to the history of the profession to which I have the honor to belong. And in opening the discussion in this manner, it is because the papers which have just been read frequently allude to the necessity of periodical audits by public accountants, and the further reason that some of those present may have somewhat vague ideas as to the meaning of the term "Certified Public Accountant," together with his duties and responsibilities.

As far back as the time of Chaucer, the profession of the auditor was considered an honorable calling, while Shakespeare refers to the auditor in the same terms. It was not, however, until the year 1854 that the accountants of Edinburgh, Scotland, organized under Royal Charter the first Society of Accountants, the accountants in the cities of Glasgow and Aberdeen following their excellent example shortly afterwards.

In the year 1880, various associations of professional accountants, practicing in London and some of the principal towns in England, were incorporated into one body under the style of "The Institute of Chartered Accountants in England and Wales," and received their charter by special act of parliament. In all of the above societies of accountants the eligibility to the use of the term "Chartered Accountant" depends upon the serving of articles for a period of five years in the office of a chartered accountant, and the successful passing of certain examination.

In this country the necessity for the employment of public accountants did not become so apparent until a later date, one of the chief reasons for this condition being that competition in business was not so keen as in the older countries in Europe, profits made were much larger than at present and in consequence the same attention to detail was not given. In the year 1890, the profession of the public accountant was beginning to be appreciated in the East, it was scarcely known in the West. But the stagnant condition of business which existed from 1893 to 1897 acted as a stimulus to the profession of the accountant, for the man of affairs found it necessary to watch every part of his business to avoid waste and extravagance in order to make the balance of his profit and loss account come out on the right side. In the year 1896 the legislature of the State of New York passed the first act in the United States creating the title of certified public accountant, conferring upon the State University the power of granting

this degree, C. P. A., to those who could qualify under same, the object of the statute being to protect the public from the employment of men of doubtful character or insufficient experience. There is, however, nothing compulsory in the act in the nature of forbidding those who are not certified public accountants from practicing as accountants, but it does enable the public to discriminate between the accountant who has qualified as a certified public accountant and one who has not. The legislatures of other states, such as Pennsylvania, Maryland, California, Illinois, Washington and New Jersey, have passed similar laws, varying from one another only in minor points.

It was in May, 1903, that the Illinois legislature passed the C. P. A. law for this State, and conferred upon the University, whose guests we are to-day, the privilege of granting the degree of C. P. A., to those who could qualify. The University of Illinois has taken up this fresh duty with its usual energy, and immediately after the passage of the act selected three public accountants of experience to act as examiners, and has given them its hearty support.

From the above short sketch, it will be seen that the profession of public accountant, although comparatively young, is now a recognized and honorable calling, and that the object of this legislation is to protect the public; for, after the completion of an audit, the last word has been said on the subject, hence the importance of only engaging those who are not only thoroughly competent but also conscientious.

Any attempt on my part to discuss in a critical manner the papers that it has been our good fortune to listen to this afternoon would indeed be foolish, for if the gentlemen responsible for them had been paid advance agents of the accountancy profession, they could not have more faithfully represented to you the importance of accurate methods of accounts and the relation of the public accountants to the trustee of colleges and universities. The fact, however, that they, instead of being paid advocates of our profession, are men of large business affairs lends additional weight to their argument. While, therefore, in leading this discussion I cannot criticise anything contained in their papers, I propose to briefly enlarge upon some of the matters referred to by them and especially upon the necessity of the supervision of the accounts of colleges and universities by professional public accountants.

Mr. Dyche, in his paper, very modestly states that he is not an accountant and that he is staggered by a column of figures. This may be so, but I would point out that the peculiar ability exhibited by the lightning calculator no more constitutes an accountant, than the ability to talk rapidly or for a long period of time constitutes all the requirements of a lawyer. I desire, however, to state the fact that whether he be an accountant or not he possesses many of those quali-

ties which constitute an accountant, and this is as it should be, for a very intimate relation exists between the qualifications of the business manager of a college or university and those of a public accountant.

The business manager must be, first and foremost, a man of large business experience and incidentally he should have a knowledge of the value of accounts and be able to interpret their meaning when reports are presented to him. The public accountant, on the other hand, must, first and foremost, be a man gifted with an intimate knowledge of all systems of accounts, methods of audit, and commercial law; and incidentally he must have such an appreciation of business requirements that he instinctively knows the character of the information required by the business manager. By combining the qualification of an experienced man of business, as described above, with those of the trained accountant, the trustees of colleges and universities will not only find themselves relieved of a large part of their burden of responsibility, but will find an ever ready source of information upon which they can form intelligent opinions before pursuing any definite course of action.

The nature of the services that can be rendered by the public accountant to the trustees of colleges and universities may, for the purposes of this discussion, be briefly summarized under two headings, Publicity and System. I shall take up these subjects in the order named.

PUBLICITY

I shall only touch upon this very briefly, as it has been so well covered in the papers already read. The certificate of the certified public accountant has become recognized as the standard expression of the accuracy and reliability of the statements to which it refers. The certified public accountant has no ax to grind, no friendships or affiliations in respect to the institution he investigates. His reports are independent statements of facts, impartial, without fear or favor. Therefore, when you appeal to the public for financial aid, whether the same be a general appeal or a special appeal to some well known philanthropist, the employment of the certified public accountant will not only beget confidence and an accurate knowledge of your needs, but if intelligence is used, in the preparation of his report and statements, they will be so simple that he who runs may read. The effect of this form of publicity will, I believe, be found of direct benefit to the finances of those institutions that depend wholly or partially upon public beneficence.

SYSTEM

If you can imagine two concerns each manufacturing the same article and each attempting to sell its product in the same market, one of which has an "up to date" system of accounts, while the other concern runs along upon the same methods employed fifty years ago,

it does not require much discrimination to decide which will succeed. As it is in business, so it is with all philanthropical and educational institutions. The college or university which does not appreciate the advantages of using records and reports which will give the maximum amount of accurate information is foredoomed to failure.

This is not the place to enter into any detailed discussion of methods, but a few pointed questions may suggest the wide ground covered by a complete system of accounts and records. If you find yourself unable to answer any of these questions in the affirmative, then to that extent your system of accounts is deficient.

Are your accounts of revenues and expenses so analysed that you can readily draw up an intelligent and fairly accurate budget for the succeeding year?

This question suggests the thought of analysis of accounts into many and various headings and subheadings. In asking this question or a similar one, I have often been met with the answer that it would take too much work and cost too much; besides, what does it matter, the money has been spent and was not spent foolishly. As an answer to such an argument, the building in which we are convened suggests a valuable thought. Chemistry is the science of synthesis and analysis. The chemist first undertakes analysis so that he may understand synthesis. He first separates to its ultimate elements the compounds presented to him, so that he may know how to manufacture them. Analysis may be compared to your detailed system of accounts with their headings and sub-headings, synthesis corresponds to your budget. To carry the illustration farther. Some gold is brought to the chemical laboratory for assay. It looks all right on the face of it, but under the trained hands of the chemist it is analysed and found to be seventy per cent pure gold, thirty per cent dross. How much dross have you in your expense accounts, how much waste. You cannot tell unless your accounts are accurately kept and intelligently analysed. It goes without saying that no money is disbursed by honest administrators for what they considered at the time was foolish expenditure, but a proper distribution of the expense accounts will show at a later date that certain expenditures have not brought the results anticipated and that such items should be cut off or curtailed in the future. In other words they are the dross, the waste.

Do you know promptly each month what your revenues and expenses of each and every classification amount to, and their relation to the appropriations made for same, and also their relation to the corresponding month or period the year prior?

This question suggests a brief digression as to the terms revenue and expense. Please note that I do not use the term receipts and disbursements. Many colleges have no other book of original entry than their cash book, and under this system no intelligent comparison

can be made. Every liability, either for goods purchased or for services received, should be entered in the month it was incurred, and the same argument holds good as to your revenues.

Do you and your business managers receive complete statements of account each month, setting forth fully the revenues and expenses of that month? and does the dean of each faculty receive a copy of that portion of the monthly report dealing with his department? If you do not follow this practice, is it any wonder that at the close of the fiscal year you find yourselves confronted with a deficit instead of a surplus?

Are the accounts with your endowment funds carefully kept, distinct one from another, as also the revenues received from such endowments? Are the uninvested portions of these endowments so recorded as to afford your business manager the information upon which he can invest same, so as to immediately make them interest bearing?

Is an account kept of every investment and a record kept of the rate of interest it is bearing, as a guide to the suitability or otherwise of a similar class of investment being made in the future? When an investment is one of property, have you detailed accounts to record the cost of operation of such property, and with the further object of being in a position to prepare comparative statements of such expenses of each investment one with another? If you hold the title to improved property, are you providing a reserve to cover depreciation; or, if it be a lease, are you providing a sinking fund? If you own bonds purchased above par, are you writing off a proportionate amount of the premium each year?

Have you a methodical manner of issuing stores by requisitions, and have you what is known as a "store-room system," so as to avoid waste and possible theft. Furthermore are all supplies purchased by a purchasing agent or the business manager acting as purchasing agent, so as to obtain the best prices and prevent extravagance?

Are you figuring the total cost of operation on a per capita basis? And here I would point out that while this is a valuable calculation for comparing the per capita cost of one year with another, if carried out understandingly, it is more important to make a similar calculation after cutting out of the operation expense all tuition fees. Unlike the ordinary factory or construction company whose sole end is to manufacture or construct at the lowest cost, we may compare the college or university to the manufacture of some specially fine piece of machinery or tool, where the cost of the material or workmanship upon it is not a consideration, or to the construction of a palace or temple where the cost of marble is only a consideration in so far as the amount of money raised for its erection must not be exceeded.

The output of the college or university is the most wonderful piece of machinery known—the brain; and what is more important still, the temple it constructs, the character it builds, is fashioned after the likeness of God. Therefore the cost of tuition per capita cannot be a consideration in the same manner as other operation expenses, except in so far that the total amount expended must be in conformity with your revenues.

Finally, do you surround those employees who are entrusted with the handling of your funds with every safeguard, so that in the hour of temptation the fear of detection may save them from committing a crime? You may say this is a low motive for adhering to the straight and narrow path. I grant it; but are we to be the sole judges and condemn the man for yielding to a temptation, the severity of which we have no conception. After fourteen years continuous practice as a public accountant, and having come in contact with many men whose defalcations I have discovered, I wish to state that honesty and trustworthiness are the rule, and that it is opportunity combined with adverse circumstances, that create the criminal. Not only to you, trustees of colleges and universities, but to all employers of trusted employees, I wish to say that you carry heavy moral responsibility if you do not throw around them the well-known safeguards of proper systems of account and periodical audits. The lack of this appreciation has been not only the cause of much loss of money and bankruptcy of business institutions, but what is infinitely worse, the ruin of homes and fair reputations.

JAMES E. DAVIDSON
Trustee of Hillsdale College

I have been very much interested in this discussion, and think it is time there was an awakening on the questions brought out by these papers this afternoon. I hoped we should hear from some of the larger colleges on this subject. I am connected with one of the smallest colleges represented in this gathering; but the remarks that have been made come home to me, because I note the soundness of the business requirements so ably set forth in the last paper read. I think what is true of the college I represent is equally true of any college I am acquainted with. I find them regularly having deficits, and eating into their endowed funds; and they go right along doing it year after year. Some of them make an effort to make good the loss; but I think there is a most regrettable carelessness on this subject. I have been very much afraid that the college with which I am connected has been cutting into the fund with which it has no right to do anything with but to make use of the income. I hope those papers will be printed and circulated, believing their usefulness will be largely

lost if they are only heard here. I think we need them, and I wish every trustee of the college with which I am connected could have a copy. I believe nothing will do more to open the fountain of public benevolence than to have the donors assured that what they give as a permanent endowment fund will be sacredly kept for all time. There is not much to encourage one to give funds to a college if he finds that the trustees are to spend the principal sum that he has set aside to be kept permanently. If we can awaken the conscience of the trustees of colleges to the importance of this, this meeting will have been worth a great deal more than it will cost.

MR. A. C. TRUE

Director in the Office of the Experiment Stations of the United States Department of Agriculture

It has been my fortune, in behalf of the United States, to examine the accounts kept of one of the federal funds granted to the colleges and universities of the various states. In this way I have seen the books of those institutions in all the states and territories; and while it is my business to examine an account which is only small in amount and limited in its application, I have, nevertheless, in connection with this examination, had numerous opportunities to become acquainted with the general methods of accounting in those colleges. I arise this afternoon simply to say that I am sure that good will come out of such a conference as this, from the getting together of representatives and trustees and accounting officers of these institutions with a view of comparison of methods of accounting out of which may come the establishment of certain principles and methods which will bring the accounts of such institutions generally into more harmonious order and establish a somewhat general system of accounting for colleges and universities. I have been impressed in my examinations of the accounts of those institutions with the great diversity in their methods of accounting. I understand, of course, the environment of these institutions is very different. The funds which they handle are naturally under very different conditions, so that I would not expect any very great uniformity of detail in their methods of accounting. But there are certain principles in accounting which it seems to me are general in their application, and which run through these institutions as a class. I am sure that such a discussion as we have had here this afternoon will lead to a better and more thorough system of accounting for colleges and universities.

FOURTH SESSION

SELECTION OF TRUSTEES

HON. PAUL JONES
Former Trustee of Ohio State University

Formerly some of the universities were divided into three classes; the magistrate, the scholars, and the disciples.

To-day in the United States we have three bodies constituting our universities and colleges: the trustees, the president and the faculty, and the students. The trustees are charged, in part, with the intellectual, moral, physical, and sometimes religious, development of a select body of youth. The rollicking and often tempestuous young men of to-day will, a generation hence, be the men who will be filling the pulpits, the teachers in our public schools, the professors in our universities and colleges. They will be the men who will be editing our great newspapers and magazines and writing our books. They will be the men who are healing the sick and afflicted, as physicians; they will be the men who will, as engineers, construct and operate our great thoroughfares and highways of travel; the architects who will erect our buildings; our lawyers and judges, who will administer justice in our courts; the educated, intelligent, and scientific farmers who will till the millions of acres of our land; in fact, the college students of to-day will, when they come to full manhood and enter upon the duties of life, be an epitome of what this nation then shall be. To the end that these young men and young women may be educated, trustees are charged with the duties of selecting presidents and faculties, of determining what studies, at least in part, shall be pursued. The trustees of colleges must determine what departments must be had at their institutions, and the trustees of the universities must determine what colleges shall be added to their university. They must look after the endowments, the budgets, and the appropriations. They must erect the halls, libraries, laboratories, gymnasiums and other buildings, and acquire land upon which they shall be constructed. Surely the duties of the trustee are multitudinous and responsible. The question comes to us as to what manner of man he should be. He should be a man of probity and character; and if a young man he should be one who promises to attain some distinction in his business, profession, or calling, in order to be an example to the students in the institution which he serves. Above all things he should have a constructive mind. He should be a man who is capable of originating

and consummating plans for the betterment of the institution. Preferably he should be a graduate of a collegiate institution,—but this is not essential. John Hopkins, Stephen Gerard, and Mathew Vassar, never acted as center rush in a foot-ball team on a university campus; they never had any college training. John D. Rockefeller, the founder of one institution, and the patron of many, never burned the midnight oil in a dormitory of any college or university. Such men would be entirely capable of serving upon a board of trustees of any educational institution in this country. One of the best trustees that I ever knew was a man who, when he should have been obtaining a college education, was a clerk upon a steamboat; but he was always a student and served faithfully and well the institution to which he was appointed. I refer to Lewis P. Wing of the Ohio State University. President Thompson, who is in the audience, will, I think, bear me out in that statement and also that he did more for agricultural education in the State of Ohio than perhaps any man who was ever connected with that institution in any manner whatever.

How are we to obtain the services of such men? What manner of appointment or selection shall be followed, in order to get progressive, intelligent, able men to take these positions? I have no patience with the trustee who is so conservative that he never can progress, and who under the name of conservatism can never do anything but argue and object. If I were called upon to revise the litany, there is just one little prayer I would insist on inserting, and that is: "From all such trustees, good Lord, deliver us." Formerly, our institutions of learning were corporations which received their charters from the sovereign. Dartmouth and Kings Colleges received their charters from the sovereign of Great Britain. Those charters provided, whether they were the charters of colleges or the charters of other public or private corporations, that the persons named therein should be a body corporate with the power of succession and power of perpetuity, and usually provided that when a vacancy occurred the remaining members should fill the vacancy. Such was the custom in our early institutions. Harvard and the University of Pennsylvania had their boards of trustees created and filled in this manner.

In 1869 John Hopkins determined to charter the institution which now bears his name. After consultation with President Angell, President White, and President Eliot, it was determined that under the laws of commerce an institution should be chartered with twelve incorporators who would become the twelve trustees of the institution, and that they should have the power to fill any vacancies that occurred in the board. The University of Pennsylvania received its charter from the colonial government prior to the revolution, and it filled vacancies in the same way. About the year 1832, Stephen Gerard died, leaving a will whereby he created a trust and provided for an institution of

learning; and in that will he conferred upon the city council of Philadelphia the power of taking charge of his property left in trust and creating a board which should control the educational institution which he created. A board was created by act of the council, and Nicholas Biddle was made chairman of the board. With some changes that institution was controlled by a board down to the year 1869, the same year in which John Hopkins was chartered. There having arisen scandals in the administration of the trust, the legislature of Pennsylvania passed an act providing that the trust should be turned over to a board of trustees consisting of sixteen members appointed by the courts. We have, therefore, in recent times an institution whose existence began with the advice and approval of President Angell, President White, and President Eliot, having a board of trustees which was a self-perpetuating body; and in the same year in Philadelphia, we have the power taken from the city council of Philadelphia and transferred to a board of trustees appointed by the court. These two methods seemed entirely inconsistent and irreconcilable, but in each case they were only following known customs, one the custom of creating corporations, the other the rules of the courts of chancery in taking charge of the trusts by the courts appointing trustees. When Harvard University was incorporated, it was both a church and a state school. The church and state were one and the same. It had a charter which provided for the filing of vacancies occurring as I have described. However, Harvard has changed as Yale has changed, and the overseers of those institutions are elected, at least in part, by the alumni of the institution. We have upon the Atlantic seaboard five institutions in which the trustees are appointed by the remaining members of the board when vacancies occur, other institutions where trustees are elected by the alumni of the institution, and still another in which the trustees are appointed by the court.

Other institutions are controlled in part in the appointment of their trustees by will, deeds of trust, or persons who are founders of them, and who place certain provisions in those documents. Some institutions are created either by special act of the legislature or by charters that are authorized by general laws, and in those institutions anything that is lawful may be placed in the charter. Therefore, we may have in this class of institutions a multitude of different methods of selecting trustees, inasmuch as the founders are permitted to inject into the charters anything that is not inconsistent with the law or the constitution. Another very large class of institutions, both colleges and universities, have a still different method of selecting their trustees. It is one of the curious things in the history of this country that our public schools and religion are entirely divorced. This is practically absolute. In Ohio the supreme court decided that it was unlawful to hold Sunday school in a public school house in the country. In

Nebraska the supreme court has decided that it is unlawful to read the Bible in the public schools. And yet these same states have placed no restriction upon religious bodies in organizing colleges and universities and placing in their charters language in which it is indicated beyond all doubt that the founders of those institutions intended to blend religion and education. Some of these charters provide in so many words that the institution, founded by the incorporators and provided for by the charter, is for the promotion of religion and sound learning. But they are in a sense private institutions; and the state does not interfere with them in any particular whatever. In those institutions the church is the moving force. Without the church they would never have been created. The church feeling the necessity of having an educated clergy, of having educated missionaries, feels called upon to organize this class of institution. Almost without exception, the president of such an institution, when called to occupy the chair, is taken from one of the pulpits of the church that has control of this institution, and he often becomes a preacher in one of the churches in the place in which the institution is located. So that there is a close bond of union between the church and the institution. The trustees of such institutions are elected by synods, or by the church association, or church bodies that patronize that particular college or university. So that if there are five patronizing conferences that have an interest in the institution, they nominate and elect their quota of trustees to control the institution. Sometimes some of the institutions permit a number of the trustees to be elected by the alumni. Again they sometimes elect trustees at large. There are still other methods of electing trustees. For instance, the University of South Carolina has a part of its board elected by the city council of the city in which it is located. These boards vary in their membership from five to fifty in number. There is but very little uniformity in their method of selection; at all events, they are selected by the different church bodies which control the institution.

Passing now to the state universities, which are not considered in law as corporations, at least by some of our courts, but as a part of the public educational system of the state to which they belong, we find quite as many methods of selecting trustees by those institutions as in any of the others mentioned. It perhaps would be proper to start with the University of Michigan, inasmuch as I believe it is now the largest institution in point of number of students. The University of Michigan selects its trustees, or regents as they are called, by popular vote. They are nominated at political conventions, and submit their claims to the electors of the state. I must confess that there is something attractive about this method of selecting trustees. It is rather captivating. The electors of the state are representatives of the taxing powers of the state. The taxing powers of the state are

the ones who nourish and sustain the institution. That is quite democratic, and it seems to me useful in bringing home to every elector in the state the fact that he has a duty to perform in respect to the state university of the state of which he is an elector. This system has worked very well in Michigan. The university of Michigan has a large number of alumni. They see to it that proper men are nominated by the different political parties, and are elected to the office. A rather remarkable circumstance took place just recently in that state in respect to the election of a regent. Mr. Peter White of the upper peninsula, a man of large business capacity, who had served for some forty years on the board of education of his city, was nominated by a republican convention as regent, although he was a democrat.

In Indiana they have a still different method. There the state board of education elects the board of trustees and the alumni fill vacancies. I presume this is done upon the theory that the state board of education represents the state in all that concerns the vital interests of the institution; and the alumni represents the students and those who have patronized it. Such an arrangement could not, for constitutional reasons, take place in Ohio. There the constitution requires the trustees of all public institutions to be appointed by the governor, thus recognizing that as an executive act. Rutherford B. Hayes appointed the first board of trustees of the Ohio State University. After serving as President of the United States he himself was appointed as member of that board, and served in that capacity for five or six years, and died while rendering that institution that service. There are, perhaps, some advantages to be obtained in having the board appointed by the governor. Men like General Hayes will accept an appointment from the governor, but would hesitate to submit their claims to the electors of the state. Since that institution has been organized, seven out of eleven of the governors were college bred men. So that so far as the appointment is concerned, we have had men fully qualified by reason of having come through different universities to make such appointments. The other governors were men of large business and public experience, and were also well qualified to make such appointments. There is one advantage that may arise where the appointment is made by the governor rather than where the election is had. Of course, in a state like Michigan, where one political party controls the state year after year, unless there is an exception, as in Mr. White's case, the men who are elected to the board are all of one political party. Whereas, in a state like Ohio, where they are appointed by the governor, the members of the board may be appointed from either of the political parties. As a matter of fact, by an unwritten law of the state the board of trustees of the Ohio State University, consisting of seven members, has been four republicans and three

democrats, politics being entirely eliminated from consideration in making the appointments excepting that the governors take the view that this is about the proper proportion between the two leading parties. I can see an advantage that would arise in a state like Indiana, where a part of the trustees are selected by the alumni. In such cases the alumni would probably pay no attention to politics.

In Iowa they have a still different method of selecting trustees. The governor and superintendent of public instruction are *ex officio* members of the board. A trustee is selected by the legislature for each congressional district. That could not take place in some of the other states, because the legislatures are confined to legislative duties by constitutional provisions and they would not be permitted to make an appointment to office. In California, the state university has, I think, state officers who are *ex officio* members of the board, and a number of them are appointed by the governor. Let us see what we have in respect to these institutions. We have trustees who are *ex officio* officers of the institution; they obtain their office as trustees by virtue of holding some other office. Probably when the people elect them to that particular office of governor or lieutenant governor or superintendent of public instruction, or whatever it may be, they do not have in mind the minor position, and they would consider the office of trustee a minor position as compared with the other, and in their selection the interests of the institution which they are called upon to serve is not taken into account. The legislature, however, in its wisdom has seen fit to make these officers members of boards of trustees.

We have, therefore, trustees elected by the people, those appointed by the governor, and those selected by a state board of public instruction, those elected by the alumni, those appointed by courts, those appointed by city councils, and those who are appointed by the other members of the board. There is absolutely no system in this country in respect to the appointment of boards of trustees.

There has recently sailed in the north Atlantic a band of some forty young men bound for Oxford, men who are appointed to enjoy the Cecil Rhodes Scholarships. When Cecil Rhodes was approaching dissolution, although he had taken part as a statesman in forming a part of the British Empire; although he had taken part in providing in the future for the education of a certain class of youth from all over the world, he remarked to those about him that there was much to do and so little done. I take it that any man or woman, upon being selected to a membership to these boards, if they will only appreciate the sentiment of Cecil Rhodes and bring to their office the sentiment that there is so much to do and so little done, that it will make but very little difference what the manner of their appointment is.

DISCUSSION

JAMES E. ARMSTRONG
Former Trustee, University of Illinois

I can give you a discussion on this subject from no broad standpoint. After the thorough discussion of the question to which we have just listened, it would be unnecessary for me to attempt to discuss, if I could, that phase of the subject.

I am glad to give you in a few statements a brief account of our experience in Illinois and something of the way it works, at least, as it seems to me. As students in the University in the early days, it seemed to many of us that this University was not coming to the notice of the people of the State in the way it ought to. It seemed as if we were struggling along without making very much progress; and we felt with great chagrin the fact that the people of the State, wherever we went, knew but little of the University. People who ought to know a great deal about the educational interests of the State scarcely knew that we had a State University, or knew that the taxpayers of the State were contributing to the support of that institution. Although, perhaps, the idea did not originate entirely with the boys and girls who were in school as students, yet that thought took hold of us in such a way that I think in later years the alumni of the University were the prime movers in changing the law. Without any attempt or intention to cast any reflection on the men who served under the old plan, or attempt at flattery to those who served under the new, I will say it seemed to us, and I presume it is a somewhat common experience, that the executive of the State did not always have the University of the State uppermost in his heart. He did not think very much about the interests of the little institution many miles away from the capital of the State; seldom seeing anything of the working of the University; feeling no great pride in the institution; he did not give it the care that an educational institution ought to have in the appointment of the trustees. While I presume all governors gave enough thought to it to appoint some good men, some earnest men, some men who had good educational ideas and ideals, they did appoint many who were indifferent, who accepted the position as an honor, and never felt obliged to discharge the trust. I think that the need we felt was that our trustees might have a broader outlook as to the future of the University. I shall never forget the meeting of the board of trustees at which an old member of the board was giving some advice to the new. He was giving the advice which came out of his experience, and perhaps he was not to blame for the things which happened so much as were the conditions that surrounded his position, which I shall try to bring out. He cautioned the new board to be conservative. "Do not go too fast," he said. "Do not ask for a large appropriation of money." He tried to impress upon us the fact that if we should make a mistake

before the legislature of the State, by presenting extravagant demands, that we might be dealt with in such a way that the institution would suffer seriously, and we might be cut off entirely from support, and the institution would have to be abandoned. He was giving this out of the fullness of his heart and his experience, and believed it was right. A younger member of the board, in fact, I believe it was the present chairman, Mr. Bullard, made some such remark as this: "It occurs to me that we have been elected to our places by the people of the State of Illinois. We have a sacred trust. The same people that elected the members of the legislature elected us to care for the interests of this institution of learning; and, if we, as members of the Board of Trustees, of this institution, do not convey to the legislature the needs of the institution, who is going to do it, and how are they going to find it out? Should not the responsibility rest upon us to present to the legislature our estimate of what the institution needs and then leave it entirely to the legislature to say whether or not it shall be done? If they refuse the responsibility will be on them." Well, the result of that little discussion was that one member after another of that body joined in the sentiment of the last speaker, and it seems to me that in that discussion was born a new life for this University.

The policy was entirely changed. To go back to the history of the evolution again, it seemed to me that the opinion of that retiring member of the board was the dominant idea of the appointed members of the board. Perhaps it is not a true view, but it seemed in the old days that the average member of the board of trustees felt that his appointment from the governor meant simply a reflection of the governor's views of the situation; that he must keep close in touch with the governor's views, and must not proceed any beyond the governor's plans, which might be entirely political, and consequently there was no progress, no independence. Another thought in connection with the change from the appointive to the elective board was the fact that it in some way brought to the notice of the taxpayers of the State, more forcibly, the fact that they had a State University, which fact we knew they did not wholly appreciate. Every two years names were presented at the various political conventions for trustees of the University; these names appeared upon the ballots, and the people of the State commenced to understand that in a peculiar sense this institution belonged to the people; that it was not a private institution. I dare say there are few people in this State who know how many charitable institutions, and various institutions for the care of children, there are in the State, supported by the public tax. Their names never appear on the ballot. Their trustees are chosen by the governor in a private way and their names scarcely appear in the public press, unless it is just a passing notice that they have been called to those

positions, and so attract but little attention. Of course there is considerable difference in the need of the public knowing about this. But it is not so with the educational institutions. Very few of the people knew of this institution under the old plan.

By the new plan it is forced upon their attention, and they must recognize that they have some peculiar relation to that institution they are paying taxes to support. When an appointive board goes before the legislature of the State—men appointed by a governor who stands with one hand on the treasury and the other upon the legislature—they will feel the peculiar relation in which they stand to the governor and the legislature. A man who is elected by the people of the State, on the same ticket with the governor, and elected in the same way as the members of the legislature, can be very much more independent. He will not be influenced at all by the feeling that would influence the man who is appointed to his position by the governor. I think it has given the trustees of the State University the greatest courage in going before the legislature, to say: "Gentlemen, we need thus and so; and you need not tell us we have no right here; we came just as you came, and we are obliged to present to you in a dignified way the needs of that institution." I think it had a great influence in the marvelous growth of this institution during the last ten or fifteen years.

There is one other feature about this elective system in the State of Illinois that was not contemplated in the change, which I think has been of great benefit. I cannot give you the full history of that movement. It is unnecessary perhaps to do so, more than to say in passing that soon after the enactment of this new law the women of the State were given the right to vote for trustees and for school officers. It gave the women of the State a new and peculiar interest in the affairs of the University; and ever since that we have had three able women who have taken their part in the affairs of the University. They have looked after the side which is usually neglected by the men, and they have had an interest in the things that concern our sisters and daughters. They have looked after the home side of the college life. They have looked after the finer side of the culture of our boys and girls, young men and young women. I think they have been of great service to the people of the State. They seek their nomination in the same way that men do. I think all those things, from the standpoint of the State, have assumed large proportions, much larger than were in the thought of any one who had this in mind at the beginning. I should be very sorry indeed if the new law were changed to make the election of the members of the board a local one. No one should be elected to represent Sangamon County, although we have a very able representative from that county who has served long and well. He is, however, not elected to represent Sangamon County; he repre-

sents the State of Illinois. If any man were elected to that position to represent a certain county or precinct or congressional district, he would be handicapped immediately. A man would feel, under those circumstances, he was obliged to do something for his own community and would cease to be the great public servant, such as he can be only when his interests extend to the interests of the State at large, representing all the people of the State.

The point has been presented by many of our speakers as to the influence of the alumni. I would be very sorry to see a change made under the law that would require a certain number of the members of the board to belong to the alumni; or that the alumni should in some way officially represent the institution. I do not believe it would be wise. We should lose a great deal more than we should gain; because people would naturally feel that the graduates of that institution believe the institution belongs to them. We do not want to relinquish any of the interest of the taxpayers of the State. We want them to feel more and more that this is their institution. There are plenty of ways for the alumni to exert their influence. It has been shown by the history of some sixteen years that it is not difficult for those who are interested to get together and to decide that they will make an effort as a body of citizens to influence the convention to have a certain member of the alumni nominated. Just so the women get together and decide that they will send their delegations and use their influence to have a certain woman placed on the ticket. That has been sufficient to secure a representation of women on the board, and two or three alumni at a time ever since the beginning of the system. If we should go too far in that direction we would do the cause great harm.

Perhaps we might make an improvement in our system in one particular, in regard to minority representation, alluded to by Mr. Jones. In states that are strongly one-sided, politically, I believe minority representation would be desirable. Not that I think anything would be done for political reasons by a board. I am sure my own experience on this Board would bear me out in that. Here a democratic board elected a man who was a strong republican, to the presidency of this University. I refer to the Ex-president Andrew Sloan Draper. At the same time I think that in certain quarters there would be a feeling of more personal interest in the situation, if there were a plan for minority representation on the board. This seems like a very personal history, and perhaps we people of Illinois take more pride in this than we ought to. Perhaps what they are doing in institutions in other states is very much preferable to what we are doing. But from my standpoint it seems to be working well, and I do believe that a certain part of the great prosperity of this institution is due to the fact that this institution has been so thoroughly advertised through the method of selecting its trustees.

SUBORDINATE ADMINISTRATIVE POSITIONS IN A UNIVERSITY ORGANIZATION

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This is the fourth session of the Trustees' Conference. The presidency has been discussed, the best methods of selecting trustees, and many other questions of first importance in university affairs. Wisely or unwisely I accepted the invitation to speak upon the present topic and I invite your attention now, at this closing session, to the working points of a university organization; to the departments where subjects are taught, where investigations are conducted, and where the actual work is done for which institutions of this kind are founded.

Universities are established because the people recognize needs which they themselves cannot satisfy. The citizens of this State, for example, have declared that the arts and sciences shall be taught to their sons and daughters liberally, and that certain investigations shall be conducted directly for the public good. They have laid these obligations upon the university. It in turn has established certain departments to do the work, and here, in these departments, is where *the primary obligations of the institution are discharged*. Whatever other good offices may be fulfilled either incidentally or by the university as a whole, it is here in these departments that the work is done for which universities are established; and it is my purpose to inquire how it fares with the people of these departments under the various theories of university organization that are either in actual operation or strongly advocated.

Again, certain of the purposes which the people have declared should be accomplished require the service of more than one department. Accordingly various groupings have been formed to meet these wider needs in the most direct manner possible; and so we have our colleges and schools, as they are called when the group is given mainly to teaching, and experiment stations when devoted entirely to research. Thus the service of the institution is exceedingly complicated; the need of organization and of suborganization is real; problems of adjustment are bound to arise here and there for settlement, and administration of some sort is both natural and necessary.

I shall try to bring out the distinction between teaching and research upon the one hand, and administration upon the other; and incidentally to show, if I can, which of these two enjoys primary rights in a university organization, and which exists for the other.

We hear much in these days of "strong administration" and the "free hand," whatever that may mean; but we hear little of the purpose to be attained thereby. Is it to facilitate the work of the departments, or to govern the faculty? Whose hand is to be free?

These are deep questions, and their answer is of moment, first to the individuals who occupy university positions of subordinate rank, afterward to the class of service rendered the public, and in the last analysis to the reputation and the future of the university.

It will save time and contribute to clearness of understanding if I confess at the outset that this paper is intended as a protest against what is regarded by many as an encroachment of administration upon work of a university, to the injury of the service and the discomfort and damage of men. The evidence of this encroachment is the growing use of the word "administration," with its collateral terms and phrases, instead of the word "organization."

Now there are two theories of university management. They are clear-cut, distinct, and diametrically opposite, in what are considered as fundamental principles. Of necessity they lead their followers to conclusions as wide apart as are the principles on which they are based. The one looks upon a university as a great administrative machine complete in all its parts, with regular gradations from top to bottom and from center to circumference, each deriving its sole authority from the next above—military fashion. The other looks upon a university as an aggregation of working unity (departments), and of groups of departments (colleges, schools, and experiment stations), each engaged in the achievement of particular and definite ends, to which all organization is secondary and subservient; each finding sufficient authority for its *work* in the nature of its obligation; each accountable to superior (administrative) officers for *results*.

The one regards the head of a department as a subordinate in every sense of the term, placing administration ahead of and over all other considerations. The other regards him as a subordinate only in an administrative sense, but as a chief in a working sense. Indeed I question the propriety of using the word subordinate, in any sense, as applied to so important an officer as the head of a working department of a university; and the present use of the term in this sense only shows the extent of the administrative hold upon university ideals.

The one regards *administration* as the principal, as it is the most conspicuous feature of university service; the other regards *work* in the department as primary and administration as secondary; necessary not to work, but to the coördination of work.

The one seems to consider administration as a thing good in itself; the other regards it as a means of facilitating business, a clearing-house of university affairs, entirely subordinate to the real work of the institution.

The one theory of university management is simple and direct because it either disregards or subordinates all other considerations to those of administration. In its simplicity lies its danger, for it sacrifices even the primary responsibilities of the head of a depart-

ment to the demands and the operations of a well-rounded administrative machine. In its directness is its injury; for, by the edict of authority it secures promptly, even on the instant, certain results to which it may have set its hand even though it override every other consideration. Nobody sees the trail of blood, but everybody admires the spectacular way in which it was done. The army without orders is idle. It has but one thing to do, obey. A university is always busy executing commissions and discharging obligations, without orders, and nobody realizes how the edicts of a strong "administration," erratic as they often are, plow through the very center of university work. So the means becomes the end, and obedience to authority the highest duty. Here is the danger to university life, the intoxication of unbridled power.

The alternative is more difficult, for it is more complicated. It recognizes the primary obligation of work and assumes that the details of administration shall fit the exigencies of service. This precludes an ideal organization according to the conception of the professional administrationist; but the obligation of public service is primary and supreme, and in some way a plan of organization must be devised that will recognize and take account of the naturally busy centers where original obligations are discharged.

Now the heart and core and soul of the one theory of university organization is authority, absolute authority, expressed in terms of administration. According to this system all action is based upon authority, which, whether expressed or implied, is *delegated from one central point, the head of the system*. The heart and core and soul of the opposition is that the *primary authority and rights of the individual arise out of the nature of the obligations he has assumed*; that heads of departments, deans of colleges, directors of experiment stations, presidents of universities, boards of control, all have their distinct and definite duties and obligations; that properly understood, these obligations do not overlap, nor do the fields conflict; so that it is a safe principle that each responsibility carries with it enough authority to discharge the obligation, and each responsible individual is supreme in affairs lying clearly within the range of his activities, and free to do those things that will most directly and completely discharge his obligations. This theory calls for less authority and more work.

The advocates of strong administrations demand one central source of authority; the opposition recognizes as many sources as there are lines to be served and individuals charged with their management. It maintains that this authority was neither handed down from above nor delegated from below, but that it is inherent in responsibility, was involved in the original engagement, and was conferred at the time and by the same authority that made the appointment to office,

all of which is held to be a good and safe principle for every man in the university, from the humblest assistant up to the trustees themselves; and, whether the field be wide or narrow, the responsibility little or great, there is always involved authority sufficient to discharge its obligations.

The advocates of a strong administration represent that university men are singularly lacking in judgment, and are valuable in proportion as they are managed; that but few men have talent in this direction and that therefore administration rises to the plane of a profession, being the one thing needful to insure results. These men look upon those suited for administration as of a different order from other men and removed from the mass by an impassable gulf; they look upon subordinates in a university like those in an army, as not possessing original authority of any kind, but as aids only to transmit orders.

The opposition contends that this system will retain only mediocrity in university positions; that the nature of department service is such as to require not only technical knowledge and skill, but personal initiative as well, together with large freedom of action; and that the plan of management through administrative authority, though giving rise to a great show of activity at central points, yet removes the most powerful incentives to individual exertion, and fails to call out and make effective more than a small fraction of the tremendous forces latent in the personnel of a great university.

The so-called "strong administration" has the advantage in the eyes of those who look on, or those who are more familiar with the business side of university affairs, than with the extensive and complicated work necessary to discharge university obligations. They who do not get behind the foot-lights see little of the consequences of too much administration.

The opposition is accused of advocating a weak system and of attempting to break down administrative authority. That makes the subject difficult of discussion because of the charge of disloyalty that is thrown around the case at the outset. But discussion is not rebellion, and the discussion of this question has become inevitable.

Nothing is further from the purposes of the writer than to advocate a weak organization, and no one knows better than he what are its certain consequences. It has always been true that a weak organization leaves boards of trustees at sea. In this condition they soon attempt to manage details themselves. Abandoning their proper functions as legislative bodies, they undertake the easier rôle of administration, acting as their own executive. The consequences of this are even more disastrous than those of too much administration. I assure you there is no thought of weakness in anybody's mind. The question is whether the system shall hang pendant from the sky, held together only by authority from above, or be built upon a foundation

laid in department work and held together by graded authority arising out of responsibility for work accomplished.

Whichever system shall prevail the heads of departments must continue to do business and meet their obligations to the public the best they can, and I desire to call your attention to certain considerations that seem to the writer fundamentally essential to the success of these officers who, though subordinate in an administrative sense, *are yet the ones through whom the university must meet and discharge the bulk of its obligations before the people.*

Every man speaks from personal bias, born of his experience and his point of view. Before continuing I should like to assure you that I am not the head of a department, much as I shall argue for the rights of that officer. I am speaking from the standpoint of a middle man in administrative affairs, subordinate to the president, superior to heads of departments. Probably as Dean of the College of Agriculture I have no claims that I could mention here as a sufficient warrant to be heard. As director of a large Experiment Station, however, and as administrative head of a group of departments discharging large and difficult obligations appealing directly to the people, the case is somewhat different. Even then I would not venture to lay my experience and opinion before you did I not feel assured that they represent, essentially, the views held by the leading men of this University, who are anxious beyond measure that a form of organization shall prevail in which *all* can take an intelligent part, a part worthy of men bearing heavy responsibilities.

The principles and practices I shall advocate are those that we have hammered out together in the Experiment Station by dint of much conference and careful discussion while engaged in a complicated and difficult public service. They have been born of experience and have established themselves among us as the most natural methods of work. We have been very near to nature's heart, I assure you, and we have felt the pulse of the people, for their needs and their demands are clear-cut and real. The responsibilities they have imposed upon the University have been laid upon us, of necessity, with only the most general instructions. They have been both difficult and dangerous. Our system accordingly has been devised with the one purpose of facilitating work and securing results.

Whether the principles and practices herein advocated are sound or whether they are false, of this I am assured,—if I, as Director, had attempted to maintain a so-called "close administration" over these departments, we should have all broken down together long ago.

Let me tell you first, as a basis, something of the conditions under which we have wrought together, in this organization of which I am now speaking. Until six years ago the total funds of this Experiment Station were \$15,000 a year. Suddenly these were increased to

\$69,000; two years after to \$90,000, and in two years more to an even \$100,000, where they now stand.

This enormous and rapid increase brought large and exceedingly definite duties, as follows: First, live stock investigation, especially in meat production, to the extent of \$25,000 annually; second, investigation into the production of corn, wheat, oats, and clover, \$15,000; third, investigation into fruit growing, \$15,000; fourth, investigation into dairy conditions with methods for their improvement, \$15,000; fifth, investigation into all the soils of the state with plans for their permanent treatment, \$25,000.

This is an array of conditions that may well appall any man, or set of men, and certainly tests the capacity of men and the elasticity and efficiency of an organization. I have heard one high in the counsels of this University say that the institution never before assumed such tremendous responsibilities, as when it accepted these appropriations. Let me show you what is involved in expending \$100,000 a year in investigational lines that will be directly beneficial to the public.

First, it is an enormous amount of money, more than \$300 every day, representing the net returns of more than fifty families.

Second, its expenditure is through a thousand channels. It is not, as in erecting a building, paid out on a few contracts, covering large and clearly specified values.

Third, the service is not along approved and well-known lines, but is largely exploration in unknown territory.

Fourth, the scheme affects directly every principal agricultural interest in the state, involving thousands of people, many of whom are men of wealth, position, and influence.

At the outset I was told over and over again that our organization would break down under such a load laid suddenly upon us. It has not been broken down and I never feared that it would. The machinery has not even creaked, and we have been exceedingly happy together in rendering a service that requires a bulletin issue of 35,000 for each edition, and that long ago gave rise to a correspondence amounting to over 10,000 letters a year, involving some of the most prominent men in the state, the nation, and the world. You will pardon this somewhat specific allusion to our affairs. It is necessary to what I have to say.

How did we discharge these new and tremendous obligations? Behold, now, I show you a mystery! So far as direct responsibility is concerned, six men did it. One of these is the director, it is true; but the work was done, and is being done, almost entirely without the use of authority.

Of conference, discussion, and planning, of objects and methods and interpretation of results, hours, days, yes weeks, have been spent on the part of these six men and their assistants. I assure there was

pre-arrangement in every movement,—but exercise of authority!! I question if it ever occurred to anybody to use it. Almost the only authority found necessary in this work has been the statute appropriating the funds, the election of employes upon the approval of the President, and the sanction of plans and appropriation of funds by the Trustees. There is a *mass* of authority in small compass. It does not touch details, yet it is ample. But little more was needed, and that in the way of relieving a few incompetents. All the energy has been expended in the *accomplishment of work* after the simplest and most direct manner possible.

Kindly bear in mind that these six men had also the responsibility for the profitable use of almost an equal amount of money for teaching purposes, and that within the six years the total number of employes in the college and station increased from a dozen to nearly fifty, so that the responsibilities to which I have alluded in some detail are but a part of the full labor of these few men. I beg you to believe that I give this specific example with the sole desire to show you what men can accomplish when conditions are favorable, and when not annoyed by too much oversight and not circumscribed by too much administrative direction.

I could point out to you one of these men who is individually and officially responsible for the profitable use of over \$50,000 every year, spent in his department alone in amounts from five cents up; and to another whose researches bring him into close relations with the most extensive dealers and the largest business interests of the country. The least amount for which any one of the four principal heads is responsible is \$25,000 a year and each has his special clientele. Think of issuing orders to that kind of men! What would be their state of mind, if upon returning to the University after a conference with leading citizens upon matters involving thousands and perhaps millions of dollars when measured by public utility, or upon policies extending over generations, they should pick up and read specific directions covering a ten dollar detail, or be compelled to take the time to request authority to dispose of a superannuated cow? Yet just such things are done and required, and just such things are advocated in the name of administrative solidarity and such other phrases of obscure meaning but of great power to confuse when real issues are up.

We attribute whatever success we may have obtained to the early and mutual recognition of a few principles and practices that can be briefly stated:

1. Service to the public was the only object recognized as legitimate, and loyalty to the University and all its interests the only restriction.
2. That each item of responsibility must be carried by the head of that department best fitted to discharge the obligation. That he

should have all the funds involved, and that he would be held accountable for results, but that his methods and the details of his work were his to devise, set in operation, and control.

3. That the head of the department, being the unit of responsibility is therefore the unit of work, and the natural unit of organization and of authority; and that he is supreme in the affairs of his department up to the point at which they touch interests wider than his own.

4. That each department should attend to its own affairs and that details should be settled as near as possible to the point of origin, where judgment is as good and knowledge of facts infinitely better than with remote administrative offices.

5. The understanding was definite to the effect that each individual should confine his energies strictly to his own subject.

6. Weekly conferences were held between the Dean and Director and the heads of departments, and department conferences are held at stated times, in most cases weekly.

7. Work within the departments is divided between individuals who, being younger than heads of departments, are supposed to be working under direction, certainly under advice, but they are given to understand that each has his subject and will be held accountable for results.

8. Every prospective employee, recommended to the President, is first nominated by the head of the department. If rejected, he would nominate another. If it is the head of a department who is recommended, the nomination is made by the Dean and Director upon the united approval of the other heads of departments in conference. The initiative in the personnel, therefore, is with the body that is to live and work together, and not with a remote officer ignorant of all but the most general considerations involved.

9. Every estimate sent up from me for appropriations of funds is the result of conference with the heads of departments *sitting together*. Lump sums are thus divided by the departments interested, and, after the appropriation is made, each individual knows how much money he may count upon for the year, with which to discharge his obligations.

I beg your pardon for bringing these details before you. They are the family affairs of a little group of university people, engaged in a most interesting and pleasant service; interesting because we believe it to be valuable, pleasant because the people love each other, for there has never yet been a case of discord or of heart-burning among us. We are all in the same boat, to sink or swim together.

I know of no better way to bring before you the principles that some of us believe in and the reason for our belief than to do as I have done, hold up a bit of real life organized and operating on plans diametrically opposite to some that are most loudly advocated, and

which I firmly believe, should they ever become really settled into university life, would either lead to explosion at points where affairs are hot with real labor or they would settle down with crushing force, smothering the very life out of individual enterprise and initiative, leaving behind lethargy and time serving, ragged remnants of efficiency, responding only to the prod of administrative direction.

Our heads of departments, and their assistants as well, have had every possible opportunity for work. Every man knows exactly his responsibilities. He knows in advance how much money he can have for the year with which to discharge his obligations. He knows too that it was all divided for he helped to make the division and therefore he thoroughly understands the basis on which it was made. In expenditures his hand is free, and his judgment, after conference, is final; because there is no better information than his to be had.

We have enjoyed another signal advantage outside of our own numbers. The trustees have for years maintained a committee on agriculture, and to this avenue of *reliable and full information* I attribute much of their willingness to take action favorable to efficient service. This advantage I believe to be vital to the best service, and I am convinced that it should be enjoyed by every large university interest. If trustees have no other source of information than the reports of the president and of the deans and directors, they can scarcely have that complete knowledge of affairs and policies necessary to intelligent action. To act without this knowledge is almost certain to lead to decisions inconsistent one with another, and so it will always be true that the most useful committees of boards of trustees will be those feeling responsible for certain interests; and so it will always be true that interests so represented will be assured the most intelligent action, and commonly interests not so represented will be unfairly treated, if only by neglect.

No other single feature of university organization is of such supreme importance to good work, and if the individuals involved have no better sense of propriety than to use it to the hurt of other interests or the confusion of the president, then it is a very good time to revise the list of employees in that branch of the service.

Well-defined responsibilities, freedom of action, knowledge of financial resources, abundant conferences, not too much administrative direction, an open avenue for information to the trustees, mutual helpfulness; these are the fundamental requisites for efficient university service.

This paper would not only be incomplete but subject to dangerous misconstruction without a word regarding the presidency, although it is a subject I am not discussing. I know the question that will first be raised; viz., "If every department is to largely manage its own affairs, and if each individual is to discharge his obligations with some

freedom from direction with power of initiative, then where is the authority of the president, and what is the occasion of his office?"

My first answer to the question is that the exercise of authority is the least of the functions of a president in such an institution as a state university. The objects to be gained are not mass effects to be achieved by onslaught and team work as on the battle ground and the foot ball field. They are rather a complicated series of achievements to be won, each by individual effort or by well considered coöperation. There is very little room for, or need of, authority in the daily operations of the university. And if the state universities ever assume the proportions of which they are capable, or if they ever succeed in serving the public to their limits it will be only through the power of individual initiative and the stimulus of individual responsibility, acting in many lines. The application of the administrative whip, or even the too frequent reminder of its existence, will not contribute to the efficiency of the best men; nor is it necessary, as I have heard advocated, to remind a man of this kind at frequent intervals that he is smaller in caliber than he has all along imagined. In all probability if he is very busy and is really accomplishing large things, he has not thought very much about himself. He is lost in his service, but it is nevertheless true that if he is awakened occasionally with a dash of cold water of this kind in the face, he is likely not to develop that spirit of loyalty that if nourished, ripens into a faithfulness of service not far removed from the spirit that suffers even martyrdom gladly.

Nor is this fatal to good organization or strong, even invincible, administration. Every man holds his place by sufferance; every man is responsible for results, and, aside from all this, a good and wise president will command leadership by the principle of the universal recognition of a superior mind without demanding it through the exercise of authority.

My second answer is that in the system described, the plans, the estimates and the lists of employees nominated, all pass under both the director's and the president's hands before consideration for final action. This is the administrative opportunity. Here is where the president can put his finger on the very pulse of the situation. Here is the place and this is the time for discussion, for influence and for *authority, if you please, and plenty of it.*

Somebody has said, "If you will let me write the songs of the people I care not who makes the laws," and I will say, "He who puts his hand upon the estimates and the personnel and the general policies will control the situation, so far as authority can control it for good." That men shall be elected to university positions only upon the president's recommendation; this is the president's high prerogative. It is one of his natural and inalienable rights arising out of the nature of his responsibilities, and if this is assured, the presidency is safe. This

is his peculiar source of power, and it is no restriction that his recommendations should arise out of nominations presented by the departments in which the candidate is to serve, insuring at the outset the judgment of his peers and an expression of confidence on the part of those with whom he is to serve.

My next answer is that the department details are both logically and physically outside the president's range of duties or responsibilities. The disposition to regard him as personally and officially responsible for department details is as cruel to him as it is detrimental to the work. It can accomplish nothing useful. It is setting our best man to picking chips around the department workshops, which not only interferes with the workmen, but consumes the time and dissipates the energies that ought to be devoted to larger purposes.

Nor should these details be thrust upon him. I have seen taken to the president's office, over and over again, matters of such common routine and trivial detail that, should I permit those of equal consequence to come to the office of the director, I should be worn to the marrow, and if I should require them I should do infinite damage by blundering decisions rendered on partial knowledge of the facts.

I plead for a decent amount of leisure on the part of the president that he may work out presidents' problems. What are they? That is not my theme, but in order to protect my position here I will indicate some of them. The representation of the university before the public through addresses, and through the wider fields of activity that only the president can occupy. New lines of work, broader policies, a larger public service, and the thousand and one new things that do not occur to the men I have been talking about, and could not be performed by them if they did.

Shall I mention a specific case? President James has suggested, and the suggestion is receiving the most careful consideration, that the various religious denominations shall establish colleges or at least centers of religious influence adjacent to the campus of the University. This is presidents' work. Who else would have thought of it? Would it have occurred first to the agricultural or the engineering experiment station? and *when* would it have occurred? and what could they do towards its fruition? Absolutely nothing. But what cannot a single man in the right place do at certain junctures if he is big enough to know when the psychological moment has arrived? and if he is there clear-headed when it arrives haply he shall not be engrossed in "picking up chips," busy about many matters here and there when the opportune moment comes his way, lest it pass by.

I place a plea for presidential leisure and a protest against a system that ties a president down to the business of daily directions. A well ordered university needs a president for other purposes than the details of daily operation.

The service of the departments is *outward* to the people. There is a larger service outward, as I have indicated, that can be rendered only by the president acting for the university as a whole. Besides this there is a service that is inward to the university that no department, no college, and no officer but the president can render. It is imperative that some great mind be free to work out from time to time new conceptions for the upbuilding of the university as conditions change, and that these energies be not wasted by the daily drain of distracting detail. The present mania for doing everything by administrative control is expressing itself alike in government and in university affairs. The inevitable results are to destroy individual initiative, to hamper the work, and in the end to break down even the administration itself and destroy it for its better purposes.

If I have made the point clear, a university is one of the few things that is larger than the sum of all its parts—that nobody desires to relegate the functions of the president to the departments; neither to weaken or destroy his position, which would destroy the organization, but that the purpose is to define it in justice to others and to itself, then I am satisfied, and will pass to other matters.

This discussion concerning the rights of the individual, of every individual in university service, especially heads of departments, should proceed and will proceed until it is determined whether men of capacity and power; or men of mediocrity and timidity shall fill university positions. And while the discussion proceeds let me remind you that it is a matter neither for levity nor for ridicule. It seems quite the fashion now to speak slightly of the faculty. It has been done in this conference. Surely men carrying responsibilities such as I have mentioned are worthy of respectful treatment; worthy to be taken seriously, and accorded an honorable place among men. Therefore, I say of the man who caricatures the teacher and the investigator and who so exhibits him that the public may laugh at him, —let him rest assured that he has amused himself and others at the expense of a class, many of whom will be remembered and honored in the world after most men have been long forgotten. The men of former times whom we now remember are those who wrought for the love of it before "strong administration" were ever heard of.

University organization is not to be likened to the national government, whose only purpose is to govern people. Something else must be assured in university life beyond good order in the faculty. The quietest man and the easiest one to manage is a dead one, but he has passed the period of usefulness.

I have been told that these ideas are visionary; that, for example, men will not divide money without quarreling. This is a libel on the intelligence, the character and good sense of responsible university men. We of the Agricultural Experiment Station are no better than

others, but our conditions have forced us out of narrow into wider conceptions of men, and of university affairs. And I thank God daily that it is so. Every man who labors early and late in the discharge of difficult duty, and who thereby wins a place high in the esteem of leading men outside ought to be able to hold up his head and say with reference, even to university affairs, "I also am a man." Who can measure the stimulus of that feeling in the very marrow of the bones? And who can assess the deadening damage to his soul when a man is told in effect that his fancy is a fiction; that he is mere material, attached to an adjustable tether, a child in leading strings, given rope occasionally with which to amuse himself—and others—when it is not likely to do damage, pulled in when its antics no longer amuse, or if they threaten to become serious.

When a man of the rank and consequence of a head of a department approaches the office of his administrative superior in fear or in trepidation instead of anticipated pleasure at the prospect of an interesting conference—I say when this thing is so, then something is wrong at the upper office, and something else is awfully wrong that makes such conditions possible. Yet so far as I am advised this is the inevitable consequences of the so-called "strong administration," except with the few individuals so conditioned as to be able to protect themselves or their interests, and except for the few who are administrative favorites. I ought not to tell tales out of school in this assemblage, yet the fact is notorious that no man is so exposed to flattery, no man so frequently cajoled by small souls, no man so thoroughly easy to "work" as the autocrat at the head of what he is pleased to believe a strong administration. Of absolute loyalty he knows next to nothing. The only logical autocrat in university affairs is the head of a department. With him, assistants being comparatively young men must often be directed; though here as elsewhere, influence, conference, and tradition are infinitely more powerful than authority.

Some one will say, "If no body issues directions, how shall standards be set and how will laws be established?" On this point let us remember that standards which live long are not born suddenly by edict; they develop out of exigencies and experience, and after a while they become traditional and then they are stronger than either law or edict. The advocates of doing things by administration do not seem to have remembered that influence, tradition, and the spirit of loyalty are infinitely stronger than authority. They seem not to realize that there is a form of organization with all the appearance of strength, but which breeds only weakness; strong and very busy at the center, but weak, even dead, at the circumference—out at the working points where it ought to be most alive.

The strongest organization is the one that is not always on dress parade, and does not always remind us that the big stick is close at

hand. There *is* an organization that is scarcely evident except when occasion arises. Then it will be found very much alive indeed, being based upon the department as the unit of work and the logical unit of organization, with natural gradations both in responsibility and in authority up to the very head—the dean, the director or the president, as the case may be. Such an organization possesses an inherent power, unmeasured and unmeasurable. It will leap into instant service almost of itself and will not break in two at any point, however severe the strain. The power of such an organization is in its traditions, and the loyalty of its members, not in the authority of its head; nor does it depend altogether upon the personality of its members, for once started it seems to be endowed with the genius of immortality.

While many good men have been spoiled and their work ruined by too much direction, there is no case on record of securing the service of a genius out of a stick by the injection of any sort of administrative virus.

Men grow and develop under responsibility, and they are at their best under a feeling that a great public trust devolves upon them. I know the objections that are raised to this proposition. It is said that men of technical training are experts, and that experts are not to be trusted with important affairs. My first answer is that there are experts and experts; that some of them are still men, and not devoid of all sense of proportions. My second answer is that any man is a better man when *feeling a personal sense of responsibility*. If there is anything in a man this course will bring it out. Therefore give him every opportunity with a free hand and in good time he will demonstrate either his worth or his worthlessness.

If a man be treated as a child he will either resent it or leave; or, remaining for the sake of bread for his little ones, he will grow small of mind and listless of effort,—an automaton if not a marionette animated only by transmitted power. I have known some of these child men; they are pitifully worthless for experiment station purposes,—like Jacob Riis's "perfectly good cat"—spoiled. Administration we must have, but let administration take its proportional place in university affairs. Let us have as few orders, as little red tape, as few card catalogs, and numbered blanks and report slips as possible. Therefore let us not fall in love with the system and forget or prevent what it is to accomplish, and let us remember after all that an institution is small or great according to the characters that compose its faculty, which is the most stable element of its personnel, and without whose loyal and intelligent and technical service no institution and no administration can succeed.

When the university worker puts on his administrative uniform, let him wear it lightly, remembering that he is to furnish oil, not vinegar for the machinery; that while he must replace worn and broken

parts, yet above all he must keep sticks out of the gearing. I have sometimes heard administrative officers say that their principal time was given to preventing things from being done. Could there be better evidence of the cumulative effect of too much administration?

Either plan can be made to work. The primary question is what kind of men will be found occupying the positions after the system has been fully established.

There is a service of the heart, born of loyalty and tradition that will serve a cause or an individual even unto death. It is born not of authority, which is never able to command even a tithe of service available; it is born of loyalty, of that spirit of doing and serving that cannot be bought with money, that cannot be demanded by authority, that cannot live under oppression or scorn. We must have this service if our universities are to realize the possibilities they may attain, or render to the public the service easily within their capacity. We can have this service in universities if we do not drive away by childish or cruel treatment those who alone are capable of rendering it. If we do drive them away then God pity the state university.

DISCUSSION

DEAN DAVID KINLEY
University of Illinois

I wish to express my hearty approval of the paper that has just been read. I judge from the remarks of the chairman that, after all, the advocates of the decentralized and centralized systems of administration are not far apart in purpose, at least. In order to bring out my own thought, I would put side by side a remark made to me not long since by President James and a remark once made by the present Commissioner of Education of the State of New York. President James said, "Do not do anything which you can get anybody else to do." That, I take it, Mr. Chairman, is a sound principle of administration. Put in other words, it means that every administrative act should be settled at the *lowest* round in the scale of administrative authority where it can be successfully handled.

The remark of Dr. Draper was to the effect that policy is determined by large bodies, but put into effect by one or a few. This also is a sound principle of administration. But in putting the policies into effect I would distinguish between what may be called concentered administration and centralized administration. In the former system, every administrative act, however unimportant, goes back for its authority to the one central officer. In the centralized administration there is a cordon of authority delegated through various steps or scales. Under the former system, one could not move a piano without the president's consent; under the latter system the piano

could be moved by the man who is in charge of pianos,—in other words, as I said before, at the lowest round of the administrative authority where the matter can be correctly handled.

REVIEW OF THE CONFERENCE

HON. S. A. BULLARD

President of the Board of Trustees, University of Illinois

It was the purpose of the committee that President James should, at the close of this conference, present a review of the work which the conference had done. We regret the inability of the President to be with us tonight and to perform that duty. He would be here were he physically able to come. However, it seems fitting that some words be said concerning the work of the conference, and I shall take the occasion to state a few things which I have had impressed upon me.

The discussions have covered a wide range of subjects, but they have concerned four classes of people; namely, trustees, presidents, members of the teaching force, and students. The students have received the least attention. I regret that they have not received more. They form the least permanent body connected with an institution of learning, and yet the institution was formed and is operated for their special aid and benefit, together with the benefits which may accidentally go to those men with whom they are associated in this community. Just what the student can do for the good government and well being of our colleges was not fully brought out in the papers and discussions. It is possible that our presidents and those having the responsibilities of administration may do well to see what aid students can give in making the administration strong and successful.

The functions of the president and the power of the executive office has been carefully and forcibly presented. In contrast with this position, we have had the position of the member of the faculty, whether instructor or head of department, presented in a logical and candid way. We have seen that there must be an executive head to the institution, and yet there are responsibilities which may be delegated to the faculty, which the president should not assume nor invade. And further, we have heard of the duties of the board of trustees as the legislative body of the institution; that with the board largely rests the responsibility of government, because the board must choose the head, establish the ordinances under which the administration shall operate, and act as the court of last resort.

Amid all this conflict of opinion as to the best place to locate the chief authority for the best interests of all concerned, we may be able to draw a lesson or two. Let us draw this one: In any institution of learning there is no person who may rightfully claim to be the institution itself. This is an age of individuality. We have heard a great

deal lately that every man should have "a square deal." That may be a term from the card room, but it has now become good English, and I shall use it. The trustee, the president, the member of the faculty, and the student, each wants a square deal, and each should have it. Each should have the opportunity to do his best in the work he is doing. He should ask nothing less, he should be allowed nothing more. The president cannot afford to believe that it is his right to use the college to make his name famous and renowned. No professor, without lowering his dignity as a man and a teacher, may presume that the college may be used to make himself noted, or to advance his personal interests. There must be harmony of purpose and fraternity of action by all the persons joined in the work of the college, in order that the college may do its best. That president is the best president who can cordially accord to every member of his faculty the opportunity to bring out the best in himself. He does more for his institution and his students, reflects more honor upon his board, and gathers more lustre for his name, if he can draw out of each teacher, and through them draw out of each student, the best his nature will produce. Such a president is a great president; such a faculty is a great faculty; and such an institution is a great institution. You cannot hide its light under a bushel.

Another lesson: No institution of learning can best accomplish its great work—that which was prepared by its founders and is expected by its patrons—unless every person connected therewith is in accord with all other persons who perform parts of the work. Every one connected with an institution of learning is bound to give to it more than the world sees that he gets from it. Individual rights exist in college as in government; but as in government the citizen must limit his actions to the good of the whole people, so in college the member must loyally accord to all others every right he claims for himself, so that the whole institution may be made great. The man who habitually believes that he should get more than he gives, can have no claim to an extended existence in an institution of learning. Selfishness and greatness can never exist in the life of a teacher or student any more than they can in the life of the saint.

These are some of the lessons I feel that I have gathered from this conference. I hope that you have each gathered as many more. If you have done so, I have confidence that the good derived here will encourage the calling of other conferences along the line followed by this one.

With the highest appreciation of your efforts to make this conference helpful to all who have been present and with the expression of a hearty welcome to you to visit again the University of Illinois, I now pronounce the conference adjourned without date.

UNIVERSITY OF ILLINOIS

INSTALLATION
OF
EDMUND JANES JAMES, PH. D., LL. D.
AS PRESIDENT OF THE UNIVERSITY

PART II.

PROCEEDINGS OF
THE CONFERENCE ON RELIGIOUS EDUCATION

OCTOBER 15-19, 1905

EDITED BY W. N. STEARNS, PH. D.



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URBANA, 1906

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PREFATORY NOTE

The public discussion of religious education in our higher institutions of learning has become of so great interest that it seemed worth while to call a conference for the discussion of the subject in connection with the installation of Doctor E. J. James as President of the University of Illinois, October, 1905. A wide interest developed in the plans and a number of distinguished gentlemen agreed to read papers and to participate in the discussions.

In accordance with the arrangements the first session was held at nine o'clock, Thursday, October 19, 1905. Professor Shailer Matthews of the University of Chicago presided over the conference, kindly giving up an intended vacation to do so.

The following resolution, offered by Professor Kelsey of the University of Michigan, was unanimously passed at the evening session:

"Resolved, that this conference recommends to the religious denominations the consideration of the question whether the theological schools in the region of the State University may not be grouped about the State University to mutual advantage.

"And be it further resolved that the chairman of this conference and the President of the University of Illinois be requested to act as a committee to transmit a copy of this resolution to the proper ecclesiastical authorities of each denomination."

The meetings of the conference were held in the University Place Church, and an expression of thanks was made at the close of the conference to the pastor and the members of that church for their courtesy.

At the evening session the following communication was offered by the chairman, and voted by the conference:

"I feel that it would be very appropriate for us to express informally if we do not have opportunity to do it formally, the warm appreciation of those who have come as guests, of the perfection of the arrangements which have been made, and especially of the hospitable and cordial spirit with which a forum has been provided for the discussion of these fundamental issues, not merely to the universities but to the public.

ARTHUR H. DANIELS,
FRANKLIN L. GRAFF,
WALLACE N. STEARNS, } Committee.

The program was as follows:

PROGRAM

Professor Shailer Mathews, D.D., of the University of Chicago, Presiding.

MORNING SESSION: 9:00 A.M., Thursday, October 19.

GENERAL SUBJECT: What Religious Education May the State University Undertake?

Organ Voluntary: Frederick Locke Lawrence, Director of the School of Music, University of Illinois.

Devotional Exercises: Conducted by Right Reverend Edward William Osborne, D.D., Bishop Coadjutor of Springfield.

Address of Welcome: Professor Thomas Arkle Clark, The University of Illinois.

Introductory Address: By the President of the Conference.

Addresses: President William Oxley Thompson, D.D., Ohio State University; Reverend B. Cassilly, S. J., D.D., Vice-president of St. Ignatius College.

Discussion:—

Reverend William Franklin Anderson, D.D., Secretary of the Board of Education, Methodist Episcopal Church.

The Very Reverend Dean Duffy, Danville, Illinois.

President William Lowe Bryan, Ph.D., LL.D., Indiana University.

Reverend Jenkin Lloyd Jones, D.D., Pastor of All Souls Church, Chicago, and Editor of "Unity."

General Discussion:—

Right Reverend Edward William Osborne, D.D.

President Lilian Wyckoff Johnson, Ph.D., Western College for Women.

President Anna Sneed Cairns, A.M., Forest Park University.

Reverend W. J. Bergin, C.S.V., A.M., Pastor St. Viateurs College.

Professor Edward Octavius Sisson, Ph.D., The University of Illinois.

AFTERNOON SESSION: 3:00 P.M.

Music.

Devotional Exercises.

Address: The State Universities and the Churches; Professor Francis Willey Kelsey, Ph.D., University of Michigan.

Address: Obligations of the Church to its Adherents in the State Universities; President Henry Churchill King, D.D., Oberlin College, Representative of the Religious Education Association.

Discussion:—

President James David Moffat, LL.D., Washington and Jefferson College, and Moderator of the General Assembly of the Presbyterian Church.

Professor John Henry Gray, Ph.D., Northwestern University.

Reverend Willis G. Bunker, D.D., Presbyterian Church, Lawrence, Kansas.

EVENING SESSION: 8:00 P.M.

Devotional Exercises.

Address: The Affiliated College; President Webster Merrifield, M.A., University of North Dakota.

Discussion:—

Dean W. J. Lahamon, A.M., Bible College of Missouri.

Reverend William S. Marquis, D.D., Representative of The Illinois Synod of the Presbyterian Church.

President David Ross Boyd, Ph.D., University of Oklahoma.

Reverend Francis A. Wilber, D.D., Principal of Westminster House, University of Kansas.

General Discussion:—Professor E. L. Rivard, C.S.V., D.D., Ph.D., St. Viateurs College.

ADDRESS OF WELCOME

By THOMAS ARKLE CLARK, B.L.
Dean of Undergraduates, University of Illinois

It is a matter of deep regret to President James that he cannot be here himself to speak a word of welcome, and it is especially so because of his interest in the subject of this conference. I am glad for him, however, and in his name, to welcome you to the University of Illinois.

The matter of religious education in the state universities is a vital one. On account of the peculiar character of its work, the state university cannot give the attention to religious education that should be given. The burden of conducting this must therefore fall upon the religious organizations which are found in the community in which the university is located. We are all interested in this work, though we may not give ourselves wholly to it. I have no doubt that statistics will be presented to you before the close of this conference, which will show you that we are not an irreligious community. A very large proportion of the members of our faculty are engaged in active religious work in the churches of which they form a part. The student community is a religious community and swells the congregations of all the churches that are located here.

I well know that the reputation of the university for interest in religion is not a desirable one, but my own experience, both as a student and as an instructor, does not warrant such a reputation. I am glad to remember that when I came to the university as a student twenty years ago, when its reputation throughout the state for interest in religion was in no way to its credit, the first organization I was asked to join was the Christian Association, and the first impression I got of the university community was one of religious interest.

I am glad that this conference has been called, because I believe that there is a responsibility upon the churches of all denominations to look after their interests here. The students are with us. They are vitally interested in religious subjects. If they are not taken care of, the church will lose a great opportunity. As members of the faculty, we shall be glad to coöperate in any enterprise which may develop or which will conduce to the religious growth of the community. We shall be interested in the results which come from this conference, and in whatever way we can help, you have only to command us.

Again, then, in the name of the students and the faculty and the president, I welcome you heartily to the University of Illinois.

INTRODUCTORY ADDRESS

SHAILER MATHEWS, D.D.

Professor and Dean of the Divinity School, The University of Chicago

There was a time when education was regarded as belonging to a sphere of life quite distinct from that of religious experience. There was a time, and that time has not altogether passed, when to be religious meant to surrender anything like intellectual liberty and intellectual power. Not so long since the leaders of education looked with considerable contempt, or at least suspicion, upon religious thinkers. Religion claimed a certainty where the scientific mind professed ignorance. It was so thoroughly devoted to the exploitation of eternity as to be indifferent to the demands of to-day; and he whose passion was for reality, and he who felt that only that was real which could be subjected to certain tests, naturally felt suspicious, if not hostile, toward those who thus refused to submit to investigation their most precious claims, and who alleged that a man could know only after he had believed. There, accordingly, grew up a feeling that religion was in some way an unreal thing, or at best a luxury in intellectual life; that an honest man must in some way forbear to be of very sure religious belief; that the sincere man must be silent as to his faith. And there swept over the educational world a devotion to what might be called the gospel of ignorance—not that men denied, but that men did not affirm. The difference between that day and ours is the difference between the day in which the man did not deny, but did not affirm, and the day, which I think is dawning, in which men not only do not deny but begin to dare to affirm.

Now, with the rise of this new confidence in the things of faith, with the rise of this new realization that life is something more than the mere gaining of knowledge, with the rise of this growing conviction that a man may believe in God and still be true to the workings of reason, with this splendid passion for reality which we are beginning to see express itself, not only in the university, but also in the church, there has come a determination on the part of thinkers to link education and religion in some way together. It would not be so difficult, I think we shall all agree, to combine those two, if to be religious and if to teach religion meant to teach certain definite dogmas or certain definite philosophies. There are those who could do that with sureness, and I have no doubt with benefit. But the university man is shy of dogmas, and the university man is shy of that sort of teaching which would compel the teacher to make replicas of himself and of his student. If I understand the atmosphere and the ideals of the university, it is not to make men like the teacher, but to make men loyal to truth, keen and sensitive to truth, madly determined to have reality and nothing but reality. The higher the ideal, of course, the

larger the difficulty. As we push out the circumference of the circle of knowledge, we increase the outside of that circle which touches ignorance. As the university plunges into the depth of the unknown, it is not with the feeling that the area of contact with the unknown is decreased, but, rather increased. But yet there stands religion. Are we to treat that simply as mortality tinged with emotion? Are we to treat that simply as a feeling of awe, born of the contemplation of this growing area which we do not know or cannot hope to know? Or, is religion that which is positive, so truly an element of the human personality that it too, like the mind devoted to other matters, is subject to education? And if it be subject to education, and if the religious Ego may be developed as may be the scientific Ego, then has not the university some duty in this regard?

I count it an exceedingly happy omen that the state university should seriously ask advice and give an opportunity for conference upon this problem. It is a testimony not to uncertainty alone, it is a testimony to the growing religious faith of university spirit. We are no longer confronted with the great antithesis between the teacher of science (using that word not in an arrogant sense, but in the largest possible sense) and the teacher of religion. The difficulty is a practical one as I conceive it, no longer one of theory. We all admit that the religious self should be developed as every other sort of self. But how? How in the state university, particularly, in which the peculiar political complications are as they are? How in the state university, in which the prevailing note is rapidly becoming that of the practical man rather than of that of the professional man, of the engineer rather than of the doctor or lawyer, of the business man rather than of the teacher? How shall these problems be settled? If we can settle these questions in any sort of way in the state university, we shall have settled them for good in any other sort of institution, for here the problem is in its most distinct, and I am inclined to think, its most important form. How to bring the state into the young men and young women and make them citizens, that is one of the great problems in which the state university is interested. How to bring the God-like nature of the young man and young woman into expression and to direct that expression into something other than a mere profession, that also is a legitimate field of education, and that must be answered in the state university, if it is ever answered to the satisfaction of this country. The denominational colleges will always bring their religious influence to bear in some sort of way upon their students, but the state university works without any influence of that sort. Yet it, too, is subject to the same law. If education be not in some way religious, then so much the worse for the society in which we live, and I believe most thoroughly, so much the worse for the state university. This conference, as I understand it, is a conference

in the truest sense of the word. I understand that the problem has been suggested to the various speakers as not a matter of mere debate. I am sure that no man of us here, with his pressure of ordinary duties, would pause to take a day therefrom for the mere luxury of an academic debate. It is because we believe that there is real need for this conference that we are here. And in all seriousness and earnestness, with the determination, I am sure, that from out of this conference there shall come some sort of practical suggestion to the state universities, first of all, and to other universities as well, we are gathered here to listen to one another and to join with each other in the exposition of what we think to be practical wisdom.

WHAT RELIGIOUS EDUCATION MAY THE STATE UNIVERSITY PROPERLY UNDERTAKE?

WILLIAM OXLEY THOMPSON, D.D.
President, Ohio State University, Columbus, Ohio

The question upon which I have been asked to present this paper opens a difficult but fruitful topic for discussion.

The American people by conviction are thoroughly religious and believe in religion as vitally concerned in the development of all true education. The fact that the church was the pioneer in higher education, together with the fact that religion and education have always been united in their interests, has given emphasis to the importance of religion in education. When, however, the common school interest grew up, there was a disinclination to insist upon the presence of religious exercises in the school on the ground of alleged interference with the rights of conscience. Associated with this was the political theory, as commonly existed in this country, that the state and church should be separate. This doctrine of separation of the church and state is even more strongly intrenched in popular belief. Under the influence of such a theory, professedly Christian people felt that it was an unchristian attitude for them to insist upon conformity on the part of those who were non-christian. The very principles which they espoused, prohibited them from forcing these principles upon others. The constitutional doctrine on this subject of education, in the first amendment to the constitution of the United States, declares that "Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof." This amendment virtually turns the whole matter to the separate states with the assurance that Congress will not legislate upon the subject. This provides for the free exercise of religion and guarantees that it shall not be established by the government. The state constitutions have followed this general principle with somewhat more extended statements as to the rights of

conscience and with certain protection so far as the support of religion by taxation is concerned.

In the earlier years, no distinction was made in legislation between the church and religion. Christianity has sometimes been declared to be a part of the common law of England and America, but the confusion that arises from identifying religion with the church still continues in the minds of many. The fact that religion was presumably the chief concern of many, whatever the different religious bodies, and the fact that the Bible was the book from which all these bodies took authority, lead many to assume that controversy was necessary and agreement impossible. In line with this belief, a court decision, "That the Bible was a sectarian book," was developed and the conclusion reached that it could not be constitutionally or legally used in schools supported by taxation.

Recent tendencies have revealed a new phase of this problem. A new, or at least an enlarged, view of the state has been developed. We are agreed to the theory that the state is something more than a policeman with a large club; we are proceeding upon the theory that it is the duty of the state to engage in philanthropic and benevolent work and that the church is not the only agency interested in religion. Indeed the people have come to demand that the state engage in what may be termed developmental agencies that are quite beyond any of the older theories. This is the most fundamental and important argument for state education. This broader view of the state reveals the fact that religion is a subject of common interest. The famous phase in the ordinance of 1787, namely, "religion, morality and knowledge, being necessary to good government and the happiness of mankind, schools and the means of education shall forever be encouraged," has received a new emphasis and the popular judgment has gained credence that religion is fundamental to good government. If education is, therefore, to prepare men not only to live under good government but to maintain it, the argument for the maintenance of religion would seem to have the best of support. Attention has been called in important legal decisions to the fact that the ordinance itself is clear on this matter. This decision emphasized the position by suggesting that it was not at all true that good government was necessary to religion, but that the dependence was, as stated in the article, and that religion *was* necessary to good government. It seems clear, therefore, that the state will never support the institutions of religion such as the church. On the other hand it seems equally clear that the abiding interest of the state in religion will be more and more manifest. Whether the state will manifest this interest by encouraging the support of religious education is the theme under consideration.

In order that we may discuss this subject candidly, I propose to review some of the court decisions upon the general question of the

Bible, religion, and the public schools, in order to discover the status of the question before us and then to offer some remarks indicating the conclusion.

(1.) THE STATUS OF STATE UNIVERSITIES

These institutions are brought into existence by the state through provision in the constitution, as in Colorado, (one of the newer states), or by act of the legislature, as in Ohio and most states where statehood was a fact prior to the organization of the university. These institutions, therefore, enjoy whatever rights are prescribed by statutes, or are accorded by common consent because not contrary to law or constitution. The state university is therefore, limited by its legal and its constitutional rights. Anything contrary to either law or constitution would be denied. It is worth while to note that in nearly every case, custom has grown up in these institutions somewhat in harmony with popular sentiment. In many of the state universities the ordinary customs prevalent at denominational colleges prevail. This, however, is purely a matter of custom and not a matter of legal right. Many of these customs, including some religious exercises, would probably cease if the question were raised in a legal or technical way. Our discussion must not, therefore, assume that existing practices are always matters of right. The right of the state to engage in education is established beyond successful dispute; whether there are any limits to the state's right to engage in education, is sometimes debated; whether it may undertake education in religion, resolves itself, therefore, into a question as to the limits to be placed upon the state's right to educate. Upon this question constitutions, laws, and court decisions are instructive in that they represent the popular will on this issue.

(2.) SOME COURT DECISIONS

Among the earlier decisions on the question of the Bible in public schools, I have read one from New England, (which, unfortunately, is not at hand) in which the court decided that the reading of the Bible was not an infringement upon the rights of conscience. The decision went further and declared that for a small minority of people to object to certain religious exercises would overturn popular government, inasmuch as any one person would be able under such ruling, to thwart the purpose and desire of a practically unanimous community.

The case of the Board of Education of the city of Cincinnati, versus John D. Minor, et al., is reported at length in volume twenty-three of the Ohio Reports. This case rose out of two resolutions, namely: "Resolved, That religious instruction and the reading of religious books, including the Holy Bible, are prohibited in the common schools of Cincinnati, it being the true object and intent of this rule to allow the children of the parents of all sects and opinions, in matters of faith and worship, to enjoy alike the benefit of the common school fund.

Second, "Resolved, That so much of the regulations on the course of study and the text-books in the intermediate and district schools (page 213, annual report), as reads as follows, 'The opening exercises in every department shall commence by reading a portion of the Bible by or under the direction of the teacher, and appropriate singing by the pupils,' be repealed." Upon hearing, the Superior Court of Cincinnati gave judgment for the plaintiff and granted a perpetual injunction against the enforcement of the resolutions, or either of them. The case was then appealed to the Supreme Court of Ohio, and the judgment reversed and original petition dismissed. This case was argued with great ability, and covered completely the question of the Bible and religious instruction in the public schools of Ohio. In the wide range of discussion the court saw fit to express its conviction that there was a total abstinence of the legislature looking to the enforcement of the religious instruction or the reading of religious books in the public schools. It further commented upon the term, "religion," to the effect that it must mean the religion of man and not the religion of any class of men, in proof of which the Court affirmed when the constitution spoke of all men having certain rights, it could not mean merely all Christian men, and called attention to the fact that some of the men who framed the constitution were not Christian men.

(2.) Another important decision was in the Board of Education in the city of Detroit. Section thirty-nine of the constitution of Michigan provides "That the legislature shall pass no law to prevent any person from worshiping Almighty God according to the dictates of his own conscience, or compel any person to attend, erect, or to pay tithes, taxes, or other rates, for the support of any minister of the gospel or teacher of religion." This case was brought to compel the board to discontinue the use of a certain book known as "Readings from the Bible" in the public schools of Detroit. The decision of the Court finally was to the effect that reading of such extract was not in violation of any constitutional provision. Some argument was there made to show that historically the teacher of religion was synonymous with the minister of the gospel. It is a matter of doubt, however, whether that decision would be sustained by the court now if the question were presented involving the demand of state funds for the person whose duty would be to teach religion.

(3.) The case involving the city of Edgerton, Wisconsin, has attracted wide attention. This decision involved the following items:

First, that the use of the Bible as a text book, and that stated reading thereof, in the public schools, is sectarian instruction, within the meaning of the constitution of Wisconsin which ordains that no such instruction shall be allowed schools. The fact that children were not compelled to remain did not, in the judgment of the court, remove the cause for complaint.

Second, that Bible reading, in common schools, as a text book, is religious worship and constitutes the school house, for the time being a place of worship, and said reading during school hours against the consent of the tax-payer compels him to support a place of worship.

Third, all Bible reading in common schools as a text book, is sectarian instruction, and the money drawn from the state treasury for the support of such schools is "For the benefit of a religious seminary" within the meaning of section eighteen, article one of the constitution of Wisconsin, prohibiting such appropriation of the state funds.

Taking these few decisions as a basis, and probably a fair precedent for any other cases that might arise, I offer the following remarks:

First, there is a distinct statement in the constitution of Michigan that no person can be compelled to attend, erect or support, against his will, any place of religious worship, or pay tithes, taxes, or other rates for the support of any minister of the gospel, or teacher of religion. Under that provision, I do not believe it would be possible to use any of the public finances of the state of Michigan for the purpose of carrying forward religious education in the University of Michigan. If it were done it would be by concession and custom, and not by authority and right of law.

Second, the decision in the Wisconsin case makes it clear that the constitution there would prohibit religious education in any school supported by the state. If the reading of the Bible is to be construed as sectarian instruction, I can hardly conceive that any instruction in religion could be provided that could not be subject to the same criticism. The principle on which the reading of the Bible was declared an act of worship, would apply equally to other instruction upon the subject of religion.

Third, the decision in Ohio, while not covering exactly the points in the two cases named above, is not in conflict with section seven, article one, of the constitution which declares that no person shall be compelled to attend, erect, or support, any place of worship, or maintain any form of worship, against his consent. The constitution further provides that no religious, or other sect or sects, is ever to have any exclusive right to, or control of, the school fund of this state. Under this clause no religious education could be undertaken that would be sufficiently broad or indefinite to evade the charge of being sectarian.

Fourth, I have not had opportunity to make an examination of the constitutional provisions or of the court decisions of all the states in which state universities are located, but it may be fair, in addition to the above, to presume that all state universities are subject to substantially the same limitations. This being true, the conclusion is obvious that formal religious education can never have a legal status in a state university.

(3.) MAY ANY RELIGIOUS EDUCATION BE UNDERTAKEN?

If we are to abide by the admission that formal religious education may not be undertaken at the state's expense, the question still remains whether there is anything in religious education that may be undertaken. Here the controversy is somewhat instructive. The agnostic has objected to all theological dogma, and the denominational adherent objects to different types of doctrine. There seems in these later days, however, a steady development among Christian people toward the conclusion that religion is greater than any of its doctrines, that there are some vital things in religion upon which all agree. The essentials of religious sentiment, such as reverence, faithfulness, faith in the unseen, duty of worship, obedience to the law of love as set forth in the New Testament, and many others of the great principles of religion, seem to be agreed upon. Furthermore, it is asserted that unless a teacher can arouse this sentiment in his pupil, he is lacking in complete preparation for his work. So long as the American people are a religious people, it may be assumed that teachers in state universities will be representatives of our common religious life. Religion will therefore be taught by example rather than by precept. The influence of the individual teacher will always be a potent factor in developing the religious character of the student. It is interesting to observe that professors in state universities are remarkably free from adverse criticism on the ground of anti-religious tendencies, or on the ground of being narrow, sectarian advocates of individual views. So far, therefore, as the personal relations are involved, the religious condition will compare favorably with that in schools where formal religious education is attempted. One other suggestion is that a state university may undertake to coöperate with religious organizations who voluntarily offer to students instruction in religion. This method has already been adopted in a number of state universities and seems to be a practical solution of a recognized difficulty.

HOW FAR THE STATE UNIVERSITY MAY TEACH MORALS

REVEREND FRANCIS CASSILLY, S. J.
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Some thirty or forty years ago, the theory became prevalent that all social ills came from ignorance, and that if ignorance were once removed from the country, a millennium of peace and happiness would dawn. So in every direction common schools were opened, high schools were erected, gymnastic apparatus was installed, kindergartens were begun, school books and stationery were given away free, and in fine the educational frenzy of the hour in America reached a height that the world had never seen before. Meanwhile all impatiently

waited for crime to disappear from the earth. For some reason, however, the state of primeval innocence was rather slow in coming. But this did not damp the ardor of the educational enthusiasts; they concluded that they had not yet done sufficient for the education of the masses, so they raised the school palaces a story or two higher, covered the walls of the class-rooms with art pictures, opened domestic science classes, installed manual training plants, and then sat down in calm confidence to await results.

The result came, but it was quite different from what they had expected. The newspapers have become catalogues of crime. The old-time honesty and spirit of honor are fast disappearing from commercial life. Disclosures are made day after day of the dishonesty of men who were regarded as the bulwarks of society. The divorce mills are grinding faster and faster, and still they can scarcely keep up with the clamor of those waiting to be loosed from sacred obligations. Old prisons are being enlarged and new ones built; special courts and prisons are being established for juvenile criminals. Everywhere there is a mad race for wealth, and the old ideals of peace and content and honor are fading away. In fact the degeneracy of society has become so notorious as to challenge the attention of the most thoughtless; and the query springs naturally to the lips, "Is this the result of the great expenditure of time and care on education? Certainly if it is, then education is not the great panacea for all ills that it was hoped it would be."

Professor E. R. Morrison of San Bernardino, California, writing in the *Educational Review*, (*), said: 'That some change in the educational system of the country, is imperatively required, seems to be generally admitted. It is an educational system which fails to educate. If our schools are doing their work efficiently, how comes it that our criminal statistics are the most terrible which the world has to show?"

At the National Prison Congress, opened in December, 1897, at Austin, Texas, the President, General Roeliff Brinkerhoff said, "First and foremost what is essential is, to revolutionize our educational system from top to bottom, so that good morals, good citizenship and ability to earn an honest living shall be its primary purpose, instead of intellectual culture as heretofore."

Only the other day in his address of welcome to the students of Columbia University, President Nicholas Murray Butler said, "If we fail in forming those traits and habits which together constitute character, all our learning is an evil. * * * New statutes may be needed, but statutes will not put moral principle where it does not exist. The greed for gain and the greed for power have blinded men to the old-time distinction between right and wrong. Both among

*Nov. 1897.

business men and at the bar are found advisers, counted shrewd and successful, who have substituted the penal code for the moral law as the standard of conduct. Right and wrong have given way to the subtler distinction between legal, not illegal, and illegal; or better, perhaps, between honest, law-honest and dishonest."

Quotations might be multiplied indefinitely, all going to show the general opinion that society is on the down grade, and attributing the fact to the absence of religious and moral training in school.

The next question to consider is, what is to be done about it? How shall we put religion and morality into our schools? In the olden days before the secularizing of the school, that is before the state set herself up in the business of education, there was no difficulty in the way, for all schools were Christian, they all taught religion and morality as well as branches of profane knowledge. It is the ill-adjusted arrangement of religious and secular education as conducted by the state, that has brought society to the sad pass in which it now is.

The people of England lately found themselves facing practically the same conditions as ourselves, but fortunately they have evolved a plan, which perhaps is the best that can be devised under the circumstances. Both in England and Canada the government now extends financial aid to all the denominational schools, so that the people of any denomination who desire their children to have a religious training, can secure it for them with the aid of the government. According to this plan the state does not pay for religion or religious teaching; it pays merely for the secular instruction, and the religious and moral training is given by the denomination.

What we have thus far said applies to education in general, but the question to be discussed to-day is restricted to state universities.

No doubt most of us here to-day agree in so far, that we should like to see some sort of religious or moral training put into the state universities. For the young men and young women, who frequent universities, are still in their formative period, they are growing and expanding intellectually, and while there is intellectual growth and expansion there should necessarily be moral and religious growth and expansion. The faculties of man, his intellect, will, and memory, must all be systematically developed if we would have him a perfect being. The man whose mind is developed and vigorous, but whose will is atrophied may indeed be a keen scholar, but he will be a moral wreck, and the shores of history are lined with the wrecks of great careers which have been shipwrecked by the lack of moral ballast. How then can we inject moral training into the state university? Let us examine some proposed plans in detail. First, the state might found a university for each denomination. But as there are hundreds of denominations in the state, this plan is evidently impossible.

Secondly, the state might turn over the spiritual direction of each

department of the university to a different denomination, somewhat on the department store plan, but this would evidently lead to "confusion worse confounded."

A third plan and the most obvious one, is for the state to teach religion in its university. But how can this be done in a country which has no state religion? Would it be considered fair to the other denominations to place the university under the control of one? This plan while the simplest of all, is open to the greatest objections of all.

In fact, evident as it is to all, that religion should be taught in a university, nothing is further from the province of a government than to go into the teaching of religion. A government has not unlimited rights and powers. Its functions and duties are clearly prescribed by its aim and object, which is the well-being and happiness of the people and the safeguarding of their rights. And it certainly is not conducive to the happiness of a people nor favorable to their rights and liberties, to have the state sit on the seat of religious authority and expound religious dogmas and duties. Surely the state has no call from nature or from God to usurp the functions of religious authority. Never was it said to the state "Going, therefore teach ye all nations, * * * teaching them to observe all things whatsoever I have commanded you."

Of course in saying this, I do not mean that the state is forbidden to aid and favor religion. No, it is a solemn duty of the state to promote what is conducive to the well-being of the people, and certainly the spirit of religion and the observance of religious duties are of the greatest importance to a commonwealth. But what I do maintain, is that the state as such has no right to establish a school of its own, and then teach of its own authority any religious dogmas. For the question would naturally arise, where does the state get the dogmas it teaches? If it has no religious autonomy of its own, it has no more right to set up in the business of religion than it has to conduct agriculture or to enter upon purely commercial enterprises, and in fact much less.

Thus far probably there is no difference of opinion amongst us. Well-meaning people, however, feeling the pressure of necessity, and being unwilling to give up the material advantages which the liberal endowments of our government afford to state universities, and at the same time perceiving the dire results of religionless education, are hoping to cut the Gordian knot by excluding religion and putting in a so-called moral training. This is on the principle, that half a loaf is better than no bread. Such men reason thus. We cannot teach dogma or religion in a purely state school, so we will prescind entirely from positive religion, and confine ourselves to the teaching of moral truths, to inculcating the beauty of virtue and the hideousness of vice.

This is practically the question at issue to-day.

In taking up this proposition, let us ask ourselves whether it is possible to divorce morality from religion. The teacher can of course present to his pupils the beauty of virtue, he can tell them that it is right and proper and becoming to obey their parents, to speak the truth, to abstain from drunkenness. In the abstract, no doubt, all students would agree with him. Even when we do wrong, our intellect is forced to admit the fitness and beauty of the opposite virtue; but that admission is not sufficient to restrain us from doing what we know is wrong. Is there any one of us who has not done wrong, and while we were doing it, did we not realize and admit that right-doing would have been better in the abstract? We did wrong although we knew it was wrong, and in spite of a natural appreciation and admiration of what was right. To know the right is one thing, to do it is quite another. Morality is not a mere theoretical science, it is eminently and essentially practical. The greatest scoundrel in the country often knows the moral law, and can speak its praises in glowing words. To make the teaching of morality practical, it is necessary to forge a connection between the intellect and the will, it is necessary to give such motives to the will as to make our love of the good efficacious. And what motives can the teacher of abstract morality propose, if he prescinds entirely from religion? He can tell the young man that stealing is wrong, that it is in bad form, that it is against the laws of his country, but what if the young man says that the possession of the stolen money is dearer to him than the approbation of his conscience, more than the esteem of his fellow men, and that as to the laws of his country he will trust to his own shrewdness and to the cleverness of good lawyers to keep him out of prison? That is about as far as the teacher of simple morality can go. If he insists further that there is an obligation and a duty to keep from stealing, because God who is the Creator and Master of us all has forbidden it, and that if we disobey Him, we shall incur His wrath in this world, and punishment in the next; if the teacher goes farther still and insists that God is our loving Father, who gives us every good blessing, that He loves His good children who obey his commands, and that He is wounded when we disregard them, that He will love and bless us in this world if we do His will, and that He will give us the delights of endless bliss in the next, why the teacher certainly proposes efficacious motives, which are sufficient to hold a man in check under the direst temptations and on the most secret occasions, but is he confining himself to teaching morality? Is such a teacher not inculcating religion? He is assuredly basing his teaching on religious dogmas. He asserts that God exists, that He is the creator and father of the world, that He will reward the good and punish the wicked after death. Are not all these dogmas? And is not the inculcating of these dogmas, religious teaching? In other words, to endeavor to teach morality without giving

strong and sufficient motives is impossible, and strong and sufficient motives can be obtained only from the arsenal of religion.

Moreover, supposing it possible to teach morality without trespassing on the forbidden grounds of religion, could the state or its representatives, the professors of a state university, teach a complete and consistent system of morality? To pretend to teach morality and then to rest content with the inculcating of a few general principles, such as "children must obey their parents," "we must not lie or steal," would be very similar to the action of one who would teach a few axioms of geometry and a few theorems about the straight line, and then claim that he had taught the science of geometry. Would not such teaching be labeled quackery by all honest men?

Morality is a definite and complex science. And is it within the sphere or competence of the state to teach this abstract and complex science? Who will be its guide and authority? What religious denomination will direct it and keep it from error.

Perhaps you will say that it will choose a system on which all men agree. Where will you find such a system? Would the state insist in its university on the Sunday closing law, would it sanction the taking of "tainted money," would it permit divorce, would it put a ban on smoking, would it allow you to pledge your neighbor in a glass of foaming wine? Men do not always agree on what is right and wrong.

Perhaps you will say the teaching of state morality would be eclectic. This might give us an American code of morality, or rather different codes of morality for every separate state, so that what would be right in Illinois would be wrong in New York or Alabama. The advocates of Sunday ball playing might have influence enough to have it stamped with the approval of the state university in Illinois, while the University of Michigan or Iowa might hold up their hands in pious horor at such conduct.

No: morality is a science and an exact science, and it must be taught in the same way in all the states. The axioms and conclusions of geometry are the same the world over, and so must be the principles of morality.

Looking at the question then from a purely theoretical standpoint as I have done, it bristles with difficulties.

The dire results of religionless education in the common schools and higher institutions of learning are so evident on all sides, that men of wisdom and foresight are clamoring for a change. President Eliot of Harvard has said (*), "No educational system can be successfully carried on without education in morals, and no education in morals is possible without a religious life."

Mr. Frederick Harrison (†) writes, "If there be such things as morality and religion, and if anything can be said or done by way

**Outlook*, Jan., 1898. †*Forum*, Dec., 1891.

of inculcating them or applying them to life, then education must be inspired by religion as well as morality. * * * Morality apart from religion is a rattling of dry bones."

If then religion and morality are necessary, and if the state university can teach neither, both because such teaching is beyond its sphere, and even if not beyond its sphere, beyond its competence and ability, and especially if morality cannot possibly be severed from religion, then it would seem that the state university as at present conducted is an anomaly in the educational world.

Such, I wish to emphasize, is the theoretical view, but perhaps wiser men than I, men whose ability has placed them in the forefront of the great thinkers and doers of the day, men who are conducting great universities to a wonderful height of material success, will be able to devise some means or methods, which will save the state university, and at the same time save the magnificent body of students, those earnest young men and women who are the hope of our country, from the terrible effects of naturalism and secularism which threaten to engulf our country.

APPOINTED DISCUSSION

REVEREND WILLIAM FRANKLIN ANDERSON, D.D.
Secretary of the Board of Education, Methodist Episcopal Church, New York City

There are certain questions which, by their nature, are of interest chiefly, almost solely, to the friend and representative of the state institution. There are other questions which, for the same reason, are of chief, almost sole interest to the representative of the denominational institution. But the question which we have before us this morning has the merit of possessing a vital interest to the friends of both types of institutions. The friend of the state institution is interested in the subject of the religious life of the institution, if for no other motive, because of the motive of self preservation. It was stated yesterday by President James and emphasized by the speakers this morning that the ideals of this republic are essentially Christian and religious. Christian in their ideals of education, Christian in their ideals as to what the product of an educational institution ought to be. The friends of the state universities are very well aware that they cannot afford to have it said of their institutions that they are Godless and faithless; and this charge which is made against the state institutions by wholesale in some quarters, is unjust and untrue.

The friend of the denominational institution is interested in this subject, because in every state university there are representatives of his denomination, toward whom his denomination has a vital responsibility. I have learned since coming to this place, for instance,

that a census was taken of this student body the past year and it was found that sixty-two and one-half per cent of the student body of the University of Illinois belonged to the different branches of the Christian Church. He would be a very stupid man, who could overlook the responsibility of his denomination to the members of his denomination that are found in the state universities.

I have made the discovery, for instance, that among the students of this university there were, last year, no less than eight hundred that belonged to the church of which I have the honor to be a representative and a member. I must feel that my denomination has a responsibility toward these students in the state university.

Now I was very much interested in the discussion of the legal status, as presented by President Thompson in the first paper that was read this morning. And considered purely from the legal status, I am sure we shall all have to agree with him, but I am sure he will agree with me, and that every representative of the state institution will agree with me that it would be a positive misfortune if the state institutions were held down to that exact legal status. We are facing a condition in our state institutions, not simply a theory. The theory has been set forth very clearly, but the conditions which grow out of the life of the people, and which have been created in response to the ideals of the people are the conditions with which we must deal. It will be my purpose in the little time allotted me, to bring to your thought, if possible, some practical way in which the interests of religion may be conserved in the state universities.

If I have grasped the problem properly, it seems to me that vital help may be given to the subject of religion from at least three sources. I believe that the personnel of the head of the institution and of the men and women who are associated with him in the instructional work of the institution is a very vital thing in the religious life of any state university. A little time ago it so happened that a gentleman of my acquaintance was invited to become the head of one of the state universities. He had been reared within the boundaries of that state; he knew it was a Christian commonwealth; he well understood that the only way by which the university could be made a conspicuous success was by meeting the ideals of the people touching religion. He made this answer to the board of regents who offered the position: "Gentlemen, I understand there are three or four or five men in the teaching force of your institution who are openly and avowedly and aggressively antagonistic to the Christian faith. My acceptance of the position which you have offered me, must be conditioned upon the dismissal of those men from the teaching force of the institution. Now, if you will clean house at the beginning, I will make it my business to see that the house is kept clean." And they were so anxious to secure his services, that they complied with his conditions. Those

gentlemen who were openly and avowedly antagonistic to the Christian faith were informed that their services were needed no longer. I am in touch with the conditions of that state university, and I am glad to be able to say that it is a stronghold of Christian influence in its power over the lives of the student body who are committed to its care. I wish this were true always. I am bound to believe that these facts are not always true of all the state universities.

Visiting in another section of the country I came in touch with a gentleman who had a sympathetic interest in the life of the university. He was not a cold and unsympathetic critic, but he informed me that there was but one man on the teaching force of that institution whose influence was in any way helpful to the religious life of the students.

I have been informed of this condition in another institution, that certain professors have boasted that they have been successful in undermining the faith of some of the students who have come to those halls of learning.

You will remember that splendid discussion of faith and religion by that great teacher, Principal J. C. Sharp, and you will recall that in one of his great paragraphs he declares that there is not learning enough in all the universities of Europe to pay for the destruction of a man's faith in God and in the things that are eternal.

Another help for the life of the state university comes from the organizations that exist among the students themselves. These organizations are a testimony to the fact that the students feel the need of a certain religious touch which cannot be furnished in any other way.

I was greatly interested a little while ago to come upon a discussion which President Eliot of Harvard presented to the National Educational Association last year, an admirable paper, entitled, "A new Definition of the Cultivated Man." He says that there have been many changes in our educational ideas, and it is well at the opening of the new century that we should gather up the results of what has been accomplished and inform ourselves of the vital things in the life of the cultivated man of to-day, and he mentions this as the very first thing, that the moral sense of the world makes character a more important element in the education of today than it has been at any time in the history of the past. Now, religious organizations among the students themselves are in the interest of the nurture of the religious life. Many of these boys and girls come from religious homes. If the atmosphere of the institution is unfriendly to the truths in which they have been reared, they feel at a great loss. I think it goes without saying that during the formative period of life, the atmosphere of any educational institution ought to be genial and helpful in the nurture of the higher ideals and the best and noblest things of life. I rejoice in the prosperity of such organizations as the Young Men's

Christian Association, and was delighted to hear the statement made yesterday by the distinguished president of this university, touching the strength of that organization in this institution. And then such movements as the student volunteer movement,—who will tell the far reaching influence of the work that has been conducted under the auspices of this organization under the supervision of Mr. John R. Mott? It seems to me every state institution ought to welcome such organizations in their student body, for after all, the purpose of the university is to make manhood, to create character of the highest and noblest type.

There is yet another help to the religious life of the state university, and that is the help which the church can give. And I am glad for the signs that are appearing everywhere in this day in which we live, that the church is becoming more vitally concerned in this problem than it ever has been in the past, that it is beginning to see that the state university affords a great opportunity for religious work. Just what practical form this effort will take is not yet quite definitely settled, but some of the denominations are thoroughly alive to the subject, and I am sure it is a matter of only a short time until all of them will fall into line. A year ago, there was brought before the General Assembly of the Presbyterian Church a resolution looking toward the appointment of a committee that should report at each successive meeting of the General Assembly touching the state of religion in state universities. In some places already university pastors have been appointed, being associated with a church located favorably for work among the university students. All these I hail as signs of progress along the right line, and I am perfectly confident that the different denominations are seeing their opportunity and will take practical steps in the near future for the realization of a better life among the students of the state institutions. I am sure it would not be a difficult thing to prove that the state university needs the touch of the denominational institution in order to make it more thoroughly and more genuinely and more deeply Christian. It would not be difficult, either to prove that the denominational institution needs the touch of the state university in order to make it more thoroughly scientific and more genuinely progressive.

THE VERY REVEREND DEAN DUFFY
Danville, Illinois

I have been taught to think of a university as a place where luminous intellects and clean hearts teach all knowledge. This knowledge may be viewed in relation to God in theology, to man in literature, and to the world in science. These branches do not exist in themselves as isolated or independent of each other; they run into each

other; they are essential to the completion of each other; they form a whole, a system, and a view of them in all their parts and relations implies that knowledge that is digested and received actively into the intellect. Cardinal Newman may talk of it as knowledge impregnated with illumined reason, or the philosophic habit. Virchow may speak of it as the scientific habit. It is an excellence or perfection of intellect that would in itself be a sufficient reason for the existence of a university. The university as a living organization has a force or bias of its own and if it should view knowledge as a thing for revenue and revenue only, it would become the mortuary vault of right human life.

We may discuss about the utilities, or inutilities, the classical or scientific in our systems of education but if our university life should be imbedded in matter, it would be infinitely better, like the poor boy of the widowed mother in the poem, that our youth never entered its portals remaining "Dexterous Gleaners" in a narrow field with books a few, and such opportunities as the village school supplied.

The true, the logical view of a university implies a clear, calm apprehension of all branches of knowledge, each in its place and each having its own characteristics. I cannot consider such a university possible without God and the soul as integral elements. When you exclude the mental man the influence of mind on mind and of mind on matter and consider physical phenomena and brute force only, then you may logically exclude truths we know about God. The name university is inconsistent with restriction of knowledge, even the knowledge of God in both natural and revealed order, is barren, indeed, a university without it is an intellectual absurdity. Mutilate the Divine and the whole of secular knowledge is broken into fragments; accept the truth of God's existence and all principles run into it as the first and last. There is no period or process in the growth of human life when moral and religious forces can be dispensed with. How can we then consistently with our constitutional limitations have all knowledge in our university system? This is the problem we are invited here to discuss. God knows, and I wish all men to know that I want no established church here and no endowment from the state for the teaching of my religion. Considering our conditions and the institutions we are blessed with, I would call it "Blood Money." I know that my church has suffered in the past from state connections, tyrant kings and adulterous emperors for a nominal protection sought to make it the hand-made instrument of the state.

State endowment tends to wither the generosity that is and should be the vital influence in religious life. I will not listen to the suggestion that a true and noble cause in America and especially in the fertile valley of the Mississippi, can fail to obtain for its work the necessary means.

If Church Fairs and kindred efforts fail us the Children of light may enter the Insurance field with its promise of Golden Harvests.

I traveled with the Archbishop of Canterbury on the good ship Celtic and I was pleased with much I heard from those around him on the subject of establishment and endowment. He ranks next to the Princes of the Blood as they describe them at home and in his presence religion is lifted up close to the throne. From his high place in the House of Lords he has a voice and influence in all legislation that affects religious interests and it was made clear to me that his friends did not view establishment as an unmixed good. They were outspoken in regard to endowments. If the state would give us the old property of the church that the charity and benevolence of the people bestowed on it in the past it would be infinitely better. It is our experience, they added, that State aid impedes our work. Curates and those in small livings, in the presence of the endowment system, are deprived of that voluntary assistance that is so necessary for them. I easily concurred with this, as these views have grown into my system of thought until they have become a part of myself. A state-endowed religion is a thing of the past and not to be thought of in our environment. The church that seeks it will cease to be. Can we hold these views as absolutely true and hope to have religion as an integral element in our system of education? If I thought the difficulty was inherent in the nature of education or that it was intrinsically impossible in our form of government, I would not be here. There are grave difficulties, but I have heard much here that inspires hope and courage. I listened attentively yesterday and this morning and I was edified. The trend of all thought was full of God and humanity.

I did not think of a prepared paper, as I was told that I was expected to review or discuss the papers of others. My work was light, as I subscribe readily to all I heard here. It is the gravest problem ever given us to solve. Individual and national life will be wholly determined by it. I feel that no nation, no period in history and no phase of human thought was better fitted to solve this vital question. We have wisely separated church and state, looking on them as distinct legal entities, yet working on the whole in harmony and sympathy for the higher ideals. America has taught the masses here and elsewhere that this earth is theirs and that they may also in faith and hope seek the Kingdom to come.

We saw clearly that individual and church effort in education did not reach the masses and as a nation we sought a remedy and poured out lavishly treasures of heart and hand on it, yet preserving the freedom of education. This nation has done so much for childhood and womanhood that we dare not say fail where she is seriously concerned. Compromise in the fuller sense is the first principle of combination, and all but the essentials may be wisely modified.

Those who want all things their own way will some day have all

things to themselves. Many methods will be tried and much experiment before final and definite results are obtained. I can only suggest that the solution of this problem may be found in blending voluntary and state efforts without compromise of principle. It has been tried in various forms in England, Canada and the Continent of Europe. There has been a season when even the Fathers of the Church were taught in pagan schools. Voluntary endowment and state patronage are seen at their best in the ancient university of Oxford, the home and sanctuary of the ideal intellectual excellence that religion nourishes and sanctifies. It is said that this school gave to England those heroes, scholars, statesmen, and sages that enabled it to subdue so much of the earth. When Old Tom rings the same curfew that has been heard continuously by successive generations of Oxonians, all are expected to seek the kneeling bench in their respective chapels. Frequent visits taught me that religious influences are self-perpetuating in this historic and sacred spot.

The subject of religious education must be viewed as a whole in our system. Voluntary aid and state effort might be united without sacrifice of principle. In England the denomination builds the school houses and the government inspects them in regard to hygienic and general structural conveniences. The teacher presented by the denomination is examined rigidly and usually normal school training is indispensable. They teach in these schools secular knowledge and in these the child is examined by the national inspection and a grant is given according to the grades and efficiency obtained. The denomination uses the building freely outside of school hours, and all the children of the district belonging to the denomination are allowed to go to these schools. The teacher is in sympathy with the religious and home life of the child and as love is the vital influence in all education it is dominant. "We can teach only what we know to those who know and love us." In Ireland, Scotland and Wales they have what they term a mixed education. There is in no case an effort to exclude religious education from the life of the child during the period of its secular training. In all that we know of either prehistoric, pagan or christian efforts in the domain of intellectual culture, we cannot say that an organized effort was ever thought of to exclude religion from budding minds. Various education bills and efforts had their difficulties but they emphasized unceasingly the yearnings of the soul for the need of moral and mental nourishment.

WILLIAM LOWE BRYAN, Ph.D., LL.D.
President, Indiana University, Bloomington, Indiana

I should like at the outset of this frank conference to emphasize my sense of the extreme difficulty of the problem. I suppose there has been no greater change in European and American civilization within the past five hundred years than the change from the established consensus of social belief which existed practically everywhere among our ancestors of that time, to the present comparative chaos with regard to many of the most fundamental problems and interests of life. In the universities of Europe five hundred years ago, one would have found an established consensus with regard to physical science, with regard to morality, and with regard to religion. One would have found this vast range of learning taught with authority in the universities, and through the universities to the people, and one would have found that this consensus was enforced wherever it was thought necessary by the state. But within these five hundred years, we have changed. There has been a progress toward what we call liberty in regard to all these things. Without raising the question as to what extent it was true, that old consensus has been broken up. The old views with regard to physical science have been largely given up, and in this field there has been established a new consensus. It is not established by governments; it is not established by the church; it is not established by arbitrary authority; it is not established in its details; it is open to constant modification; still, we have to-day among men of physical science one of the most remarkable agreements that we find anywhere in the history of the world.

But we have not reached a corresponding consensus with regard to those things which touch human life and human conduct. The common people still maintain the old religious faith, the traditional faith of Christianity, and still more generally the traditional views with regard to morality, but the universities of the world do not maintain a like consensus with regard either to theology or to morality. The proof of this can be found by an examination of the writings of the professors of theology and ethics in the great universities of Europe.

We are just as far from having among the university men of Europe what can be called a scientific or philosophic consensus with regard to morals, as we are from having there a consensus in regard to religion.

We confront a problem of extreme difficulty. I have no final solution to suggest for it. I can only suggest this, that the men and the women who believe in religion and morality, the men and the women who believe that there is in religion and morality something which is central to everything else, must regard themselves as missionaries. Admitting the difficulty to be as great as anyone can declare it to be, they must hold themselves bound to stand with all their

might for the truth and for the life which they regard as most essential.

It is a fact, as anyone may know who is acquainted with the life in our state universities, that there are always some men there, however they may formulate their beliefs with regard to religion or morality, who have adopted a serious attitude toward the religious and moral life and who, whatever they may teach, and whether they say anything publicly and formally about religion or not, stand by their spirit, for the truth and for a good life. As matters stand, perhaps this is the best thing that is possible in the state universities, but I believe we should have something more; I believe that the churches should maintain in close connection with the state universities some men who are in a peculiar sense religious leaders.

It is made the reproach of the state universities that very few of the young men go into the ministry of any church. That is partly to be accounted for by the fact that some of the young men who might become ministers go into the Young Men's Christian Association work, and some of them go into the work of charities, and some of them become teachers. But in my judgment, the reproach is not ill founded. There ought to be in this generation, as in every generation, a due proportion of the very best of the young men who should become priests in the highest sense of the word. In order that this may be so, there ought to be in close connection with the university a man who represents the church at its best.

They say young people are not interested in religion. That is not my experience. My experience is that the young people are more interested in religion than in anything else. And one such man, one man fitted to be a bishop of souls, in one of these universities where there are thousands of young men gathered together, would allure many a young man into the life that belongs to him and to the life that it is his duty to follow.

I am told by those who are students of Christian history, that in the first century the Christian church wen to the great capitals of culture, they went to the great cities of the Roman Empire and established themselves there, and presently became the greatest force within the empire—an empire within an empire—and the old religion sank away into the villages. If the religious people neglect the great capitals of culture, at Ann Arbor, and Madison, and Minneapolis, and Urbana, where thousands of young men have come up to study, they will do precisely the opposite thing from what the apostles did in the first century; and if the church loses the battle in such places, it will sink away into a second paganism.

Today the greatest missionary field in the world, and the field which is almost unoccupied by the churches, is the field which is offered in the great American state universities.

JENKIN LLOYD JONES

Pastor of All Souls Church, Chicago, and Editor of Unity, Chicago

"I dip my pen in the blackest ink, because I am not afraid of falling into my ink bottle," said Emerson. The sainted Frances Willard once introduced me to a good, conservative audience, as a member of the W. C. T. U. She said the "W" excluded me, the "C" was doubtful, the "T" as they taught it was sometimes a source of discontent to me, but I made such a fuss about the "U" that they had concluded to take me in in good and regular standing.

If a university means anything, I suppose, etymologically and historically, it is because of its great emphasis on the "U." It borrows its name from the biggest word in the dictionary, and therein lies its inspiration.

I did not realize that the subject was fraught with such difficulties until I came to hear these discussions. If it is a matter of analysis, of definition, indeed the case is desperate. If religion is a thing of terms and dogmas, lines and traditions, the case is hopeless. But if religion is an attitude of the spirit, a temper of the heart, a movement of the mind, a hospitality of the soul, then the university stands at the center of the hope of religion,—the university as it is,—and, above all universities, the state university is pre-eminently so.

And so I cannot take with much complacency or comfort the suggestion that this question is to be solved by surrounding this campus or any other campus with a cordon of denominational houses, each of them flying its sectarian flag, bringing again, whether or no, the competitive business into the field which is the last to recognize the inspirations of the new method of coöperation and of combination.

I recognize the impossibility that the university should touch all the circumference of religion as I or anybody else understands it, but I believe it is a possibility for the university to touch the center of religion, if, as I say, religion is a movement and not an attitude, a temper, a hospitality. Some kind of catholicism, some kind of an altogetherherness, some kind of a common interest, some kind of a confessed brotherhood, is the very foundation of culture, the end and aim of study; and so far as the universities represent culture, they must represent this altogetherherness which is the hope of religion.

I look for a very decided rearrangement,—call it whatever you like, you academic people, who are up on the new terms,—but there is coming a recodification, surely, more rapidly than we know, of the curriculum of the university.

The pedagogical ladder, as you gray-headed folks will remember with me, has been something like this: In the '70's, you pedagogues were demanding more English. You said, "Give the boys and girls more control of the mother tongue." "English to the front," was

the call, and in that respect the curricula were rearranged. In the '80's the demand was, "Teach our boys and girls to use their eyes and ears; give them a new idea of things." "Science to the front," was the cry, and science came more emphatically to the front. In the '90's, the demand was, "Teach our pupils to use their hands, give them a means of earning their living; remember that trained muscle makes for trained brain." Technical knowledge, "manual training to the front," and it came to the front. In this first decade of the 20th century, the last word, the one word to conjure with today in academic circles, with all due respect to those of you whose work lies in other fields, is sociology. "Teach our pupils their corporate relations, teach them to become potent factors in the community." And that is coming. I believe, my friends, all disputed questions laid aside, that we are coming to another new demand in the second decade of the 20th century, or if not so soon, then in the third or fourth or sometime,—I care not if it is a thousand years hence,—the demand will be, "Make men and women; teach character; give them knowledge of the forces that make for excellence and for goodness and tenderness and sympathy." "Ethics to the front!" I do not know whether this is religion or not, but it is the province of the university today, a province which no one disputes, from the Romanist to the Agnostic. All of them want the university to make men and women. There may be better and worse ways, but certainly some of the ways, some of the new ways by which we can impress the students of our universities along these high lines is the better reading of history, the rearrangement of our text books, placing a new emphasis on the story of the race, for history up to this day, as presented to our boys and girls, is too much a story of generals and kings and capitalists, and material triumphs. The real story of the race is an undiscovered secret, except to one who studies it from the standpoint of the prophet or the bard, the sage or the reformer. Away above the ruins of Babylon and Ninevah of those days towers the story of Hammurabi, and away back of the iniquitous crime of Warren Hastings and Clive, begins to glow the story of the great Prince Buddha, the enlightened, who touches today, perhaps four hundred and seventy-five millions of human beings. It is a shame and a disgrace that our universities should send boys and girls out into the world unconscious of these mighty inspirations of history. And this is quite within the province,—I am staying out of disputed territories, if you please,—of the universities, to give the history from the standpoint of ethics, of spirit, the ideal standards. Give them history in the concrete, if you please, give it to them in the great conspicuous illustrations; let them know Confucius and his power over the mighty millions of China,—this is the academic thing to do. Our students need to know about it just as much as they need to know the traditions of the horse,—all about the three-toed, two-

toed and one-toed horse in which our scientists, and I with them, so much delight.

The man who reads the *Odyssey* vitally and vividly in a good translation does more for himself and for his children, perhaps, than if he had learned to stumble over the verbs and nominatives of it in the original. We need not only English literature, but literature in the English, and that means the master pieces of the past brought with academic precision into the lives of our children from the grammar grades up. The classic stories of Greece and Rome are safe in academic circles, because they are our so-called "classics," but the great wealth of poetry and philosophy that lies in the other literatures of the world must be brought to bear upon the lives of our boys and girls by direct and inspired instruction, and that will make for religion. I do not know whether this is religion or not. I do not care just now. I want things that will shape the lives of our boys and girls and make them earnest and interested and enthusiastic.

Another thing our universities can do, as the President from Indiana has just said, they can teach inspiringly anyway. Dismiss every wooden-headed teacher, however wise he may be. It was Channing who said, "I would rather have my children taught error in an inspired way by men who have the courage of conviction than to have them taught truth listlessly and in an uninspired way." Give us more inspiration in our chairs, more personality.

When I visited the campus of Berkeley a few years ago, the whole place was pervaded with the spirit of such personality. Two names were the words by which the University of California conjured in the interest of culture and nobility, Professor Le Conte and Professor E. R. Sill. Le Conte was down to teach geology, but the Lord had appointed him to teach life to those about him. His students took their geology incidentally, but they took their inspiration directly. E. R. Sill in his short life there of only three or four years, was open-eyed toward the skies; he was in communion with the stars; his heart throbbed with the poetry and the prophecy of life, and he left his stamp on that place.

Twenty-five or thirty years ago, we Wisconsin men remember how Wisconsin University had a President who was not very much of a success in politics; he was a failure as a hustler; the finances did not go well. But John Bascom put his mark on the boys and girls as a steel stamps the soft wax, and men and women now grown talk reverently of the man who was President of Wisconsin University when they were there. He brought the soul face to face with realities by the power of his personality.

And then again, I do not know, my brethren, where the line lies between ethics and religion, and I do not think we shall be troubled much about it unless we undertake to survey that doubtful line, but

you will all agree with me that Matthew Arnold was right when he said that three-fourths of life was conduct, and within that three-fourths of life lies the common ground of the universities. Mr. Chairman, here lies the undisputed faith of inspiration. When we come to that point where life, character, beauty, gentleness, are worth more on the campus in the way of kindling enthusiasm than the brawn of the gridiron, we shall be getting back or going forward to the inspirations of religion.

When we find today professors and their wives and the Presidents of the universities witnessing gladiatorial contests with their thumbs turned down in the presence of any brutality, we may well indeed tremble for the fate of those forces that deal in kindness, gentleness and submissiveness, in hope and prophecy, which to me are so nearly religion that I am not going to waste any time or strength in trying to find something finer to stand for religion.

GENERAL DISCUSSION

RIGHT REVEREND EDWARD WILLIAM OSBORNE, D.D.
Bishop-Coadjutor of Springfield, Springfield, Illinois

At the town of Carlisle, Pa., there is a school for Indians. There are a thousand Indians there, and if you want to have your hearts melted with love toward the Indian and inspired with hope of what may be done, go to Carlisle. I spent three days there when Colonel Pratt was at the head of the school. I asked him about religion in that state institution. His answer was quite simple, methodical, business-like, and good. When an Indian goes to Carlisle, he is questioned, not by the Christian Association, but by the authorities, by the head of the school, as to what he is, Christian or pagan. If he answers "Christian," of what denomination or church. He is written down as belonging to that denomination. His name is sent at once to the pastor of that denomination, if there be one in the place; if not, to the one which is established at or near his home, and the pastor is told that this boy or girl is there. On Sunday morning all the Christians belonging to a particular denomination are assembled and are marched to their respective places of worship. In the afternoon, the minister of any denomination may come, if he pleases, in his own person or by accredited teachers, and give religious instructions in one of the rooms of the institution to the boys and girls belonging to his own denomination. Further, one day in the week is also set apart on which he, personally or by accredited representatives, may give religious instruction to those same people as a part of their regular education. It costs nothing to the state. It is a recognition of religion. The Roman Catholic priest himself comes at times; at other times, he sends sisters who are qualified to teach the women and the girls. And

the other religious societies in the town do the same, and the priest of our own church carries on his work. I know of no objection to it there, and I see no reason why there should be anywhere.

Here is a solution,—and it costs nothing,—not a perfect solution, not the final one, but a beginning, a possible one, and one that will lead on and show what else may be done, and one that will, I have no doubt, develop the need of further work in the way of religious instruction. It may bring together in the community some that are separated. It will provide at least that every student in the university shall have an opportunity for religious teaching brought before him without any violation of conscience, without any repression of his liberty, and, I believe, without any breaking of any righteous state law. Let every representative of every religious society that is represented among the students of the university found upon count, have the right to go to the president and say, "We have so many students here"—be it only ten or six hundred—"Give us a room in the university buildings where we can gather our people together on Sunday for religious worship and for religious teaching. Further, give us a room where we may gather those same students on a week day night or a week day afternoon, where we shall not interfere with your work, that we may carry out the teaching in further detail." Now, I believe if the representatives of religions were to come to the president of this university and ask that, it might be done. It is possible he would say, "I haven't the power." And then let us say to him, "Go down to Springfield and get the power, and if you go to Springfield and ask the power, you will find that we will always stand behind you." With the religious forces of this state standing by the president, I believe the legislature at Springfield would give us the opportunity of using the buildings at such times as they are standing empty to lead souls upward and train them to live for the glory of God.

MISS LILIAN WYCKOFF JOHNSON, Ph.D.
President, Western College for Women, Oxford, Ohio

As president of a college for women I would have a great deal of hesitation in taking part in a discussion upon religious education in state universities and colleges, if it were not that in the state of Ohio our state universities are all co-educational and therefore have a large body of women enrolled and also if it were not for a somewhat unusually wide academic experience—for I was a student at Wellesley, University of Michigan and Cornell, and a teacher at Vassar, University of Tennessee and am now at the Western College for Women. I have therefore known intimately three state universities: Michigan in the Central West, Cornell in the East, and University of Tennessee in the South. For the women's colleges, such as Vassar, Wellesley and

The Western, the question of religious education is in a large measure solved. The problem therefore concerns especially our large co-educational universities, and toward the solution of this problem I should like to make two suggestions.

The solution of the problem of social training as it has been begun here by the building of the Woman's Hall has interested me greatly. It seems another proof that we are realizing more and more that education does not mean training along intellectual lines alone but rather the all-round development of the student, that is, along spiritual, intellectual, physical, social and practical lines. For a long time, the physical was absolutely neglected, but to-day what college campus do you enter which has not its well-equipped gymnasium? If we recognize that there should be a spiritual phase of training and education, why not give to the spiritual its house, as we have done with the physical? Why should not every college campus have a chapel? But there arises the question of denomination; however, in Europe you will find churches with a Roman Catholic altar at one end and a Protestant pulpit at the other. Cannot we have upon every college campus a chapel which can be entirely undenominational? And I would have that chapel open for the same hours that the gymnasium and the library are open. All honor to the Roman Catholic Chruch, which has not only spent so much money on its beautiful architecture but has added the amount necessary to keep custodians in its houses of worship constantly, in order that they may be always open. Shame to us Protestants that we spend what we do on our buildings and then close the doors except for a few hours on the Sabbath! The college chapel should be open from early morning until late evening. I would have small reading rooms where there should be a religious library and religious papers. I would have a conference room where the pastors of the churches could come at stated times for conferences with the students. I would have religious exercises conducted by men of different denominations from the city itself and by those who would come from a distance for that purpose. Let our students see that we have the same reverence for religious training that we have for the physical by putting upon our campus the most beautiful house that we can secure and leaving it open for them to come there and worship, alone if they will, or enter into the conferences if they desire or listen to religious services by the best thinkers that we can get for them.

My second suggestion is this: a state university does not house its students, and one of the greatest problems is the lack of home life. Why do we not take care that our students shall have religious homes in the cities where they are housed? Do we not know worthy Christian women who would be glad to come to Urbana or to other college towns, for the purpose of establishing homes where groups of a dozen or more

boys or girls could have a home, surrounded by the best religious and social influence. The housing of the students is one of the great problems in our state universities to-day. If we can get noble men and women to come and live in these places, to sit at the table three times a day with ten or more of our students would not this help to solve the problem? The Mohammedan religion is in a book, but the Christian religion is the life, and the young people will never get religion out of a book in our state universities; they must get it from contact with noble lives, and that influence should be in the home as well as in the chapel.

MRS. ANNA SNEED CAIRNS
President, Forest Park University, St. Louis, Missouri

I have felt that if when this proposition is closely stated, the university which, by its name, turns itself around the whole circle of human knowledge, is never to look or touch upon the greatest of all themes, the relation of the soul to eternity, to God, to the endless ages, and the relation of that soul to its brother soul, in the time that it has here on earth, that it has omitted the greatest of all subjects. To state such a proposition is to refute it. I have felt this in practical teaching, having been a teacher now for almost forty-five years. I have felt that the greatest thing that we could bring to bear upon any man or woman, any boy or girl, committed to our charge, was this great subject, the relation of the soul to its God, the relation of each soul to its brother soul. And the university that deliberately says that we cannot touch this cuts itself off from the greatest and highest knowledge in this world.

In this discussion much valuable information has been given us in regard to the constitutions and statutes of the different states and we have been shown how in the separation between church and state it is impossible to have any religion or morality taught in our schools. Surely the wish is father to the thought. Is there not a confusion of thought here, confusing ecclesiastical organization with religion? Have we no Chaplain in our Senate? No Chaplain in the House of Representatives? No Chaplains in our different State Legislatures? No Chaplains in our Prisons? No Chaplains in the regiments of our army? Does not our President appeal to Almighty God, to help him discharge the duties of his great office? Does not the solemn oath that is taken in every court of justice show that the state must lean upon Almighty God in the highest of its functions, justice between man and man?

People have accustomed themselves to look at statutes as if they were things that could not in any way be changed, like the everlasting hills that cannot be removed forever. But we were told yesterday

that our Legislatures are the graveyards of statutes. And I have felt that when a Christian community grasps this thing, that when the American people grasp this question, they will find a way to overcome this difficulty in constitutions and statutes. Those technical things that are brought up seem so superficial when we look at them. To push the thing so greatly that any house in which religion is taught for a few minutes becomes a house of worship supported by the State, is pushing matters to an extreme. And there has been a reaction in America, a very decided reaction, and public sentiment, the feeling of the fathers and mothers for their boys and girls, has come to take a very firm stand. What we need to consider is, how this can be done, and I am so glad of this religious conference, and I hope that something practical will grow out of it, and that fear of statutes will die away. A statute is simply the will of *that* Legislature expressed, and the will of the next Legislature is frequently very different. I know this, for I was Legislative and Legal Superintendent of the Women's Christian Temperance Union in the State of Missouri for seven years and attended the Legislature steadily, and discovered that the dreaded Legislator was but a "mere man," and as soon as he knew what was the actual will of the people, and that the people meant to have their will, even if it involved dispensing with his own services, he usually found a way to come over on the people's side.

I want to say one other word, I have never found anywhere that anybody objected to our teaching everything about Buddha and Confucius. That is all right. But the instant that you lay before the heart and mind of your students the life of the Lord Jesus Christ, the greatest Jew that ever the Jewish race produced; the greatest political and civic authority, who solved every problem in Sociology with the Golden Rule, nineteen centuries before there was any sociology; the greatest Philosopher, before whom Socrates pales, and Shakespeare grows dim; the greatest man that humanity ever produced; yea, the Divine Man, that instant there are many to say "Stop! this is sectarianism."

W. J. BERGIN, C.S.V., A.M.
Pastor, St. Viateur's College, Bourbonnais, Illinois

To me, it is a great surprise and a great pleasure to find this conference unanimous on the proposition that religious training cannot be divorced from secular instruction; that if we hope to attain the highest results in our educational efforts, we must introduce into our school curriculum, into our universities even, a religious education.

Now, whilst I accept this position heartily and completely, I do not believe that the question of religious education is yet a university question. I accept the definition of a university given yesterday by

Dr. James in his admirable address. It is not a place where mere boys and girls are to be educated; it is not a place where the rudiments of knowledge are to be imparted; it is not a place where education is begun. It is and it should be a place where education is completed. If this principle must be admitted when applied to secular training, then we must accept the logic of our position and maintain the same principle for moral and religious education.

Consequently this problem is further back than the university. It is not sufficiently advanced as yet to be a university problem. I do not mean to say it may not become a question with which the university will find it necessary to deal, but it is not so at present. It is still a problem for the elementary school which we have not even attempted to solve. What would you think of the man who should begin to debate university education before he had made the slightest provision for primary training? You cannot begin with the roof, you must begin with the foundation. The elementary school is the foundation of the university, and, just as in the matter of secular training the university rests upon the primary school, presupposes it, and cannot exist without it, so also in religious and moral training, the university presupposes and must rest upon the primary school. Take this away and it is idle to talk about what you may do, can do, or ought to do, in the university. Since, then, it is the unanimous opinion of this conference that it is necessary to introduce religious teaching into our universities, we must first of all introduce religious instruction into our primary schools, into our grammar schools and colleges. Then we shall have a solid foundation upon which we can base the highest religious teaching in our universities. Every speaker, who has addressed this conference, has expressed the conviction that religious truth is the highest, the most inspiring element that can be brought to bear upon human life. Shall we deny our children what we are so eager to secure for the young men and young women at our universities? Having admitted that religion is the most powerful factor in the development of pure, noble character, in the formation of the best type of citizenship, would it not be criminal to deprive our children of what is so essential to their well-being? If primary, secular education were wholly neglected, we would readily acknowledge that the very life of the university was threatened. Shall we be less solicitous for religious training in the elementary schools? Shall we not acknowledge with equal frankness that it is impossible to carry on the work of education, in any sphere, in the university, unless the foundation is laid in the earlier periods of educational work? If religion be the powerful influence for good which we have acknowledged it to be, would it not be self-stultification not to admit its necessity in every school and college as well as in the university? We should be like the man willing enough to say two and two, but refusing

to draw the conclusion as four. We have admitted without a dissenting voice, that religion is the most beneficent, the most uplifting, the most ennobling influence which can be brought to bear upon human life. How, then, can we hesitate to admit its necessity for the young boys and girls, the young men and women, who are attending our grammar schools, our high schools and colleges. In all our other educational efforts we build from the lower schools upward. Why reverse the process in religious teaching which we confess is the most important of all? Therefore, I say we are approaching this question from the wrong standpoint, we must begin with the elementary schools.

EDWARD OCTAVIUS SISSON, Ph.D.
Professor in the University of Illinois

I want to speak of three points which seem to me to bear upon the clear comprehension of the question in hand. The first is the very point on which the last speaker congratulated us, which at first sight certainly seems a matter of congratulation, but to me seems almost the only criticism which can be passed on this gathering and other gatherings of the same sort, namely that everybody here believes in religious education. Now, it seems to me there are two voices we should have here, at least, in addition to those we have. Those are the voices of the Jew and of the Agnostic,—the voice of the man who is against the doctrines that we call technically Christian, and the voice of the man who is against any religious instruction whatever,—if we can find such a man. We must take account of these men. It is useless for us to go on and make plans for religious instruction without taking into consideration these important factors in our communities.

In the second place, reference was made to the religious instruction in England, in a way which seemed to imply that the English situation was solved. I have had occasion in the last two or three years to give very close attention to the religious instruction in several European countries, particularly in England, and the situation there is far from solved. The fact is rather that the question of religious instruction is now blocking the whole progress of the fortunate English situation as to education. England is striving almost in death throes for a *system* of public education, and can't get it, because of this tremendous question of religious instruction.

In Germany each child has religious instruction. I went there strongly biased in favor of religious instruction, and I came away, I must say this briefly—with a strong feeling that rather than have such religious instruction as Germany has, it would be better for us to go on as we are; and many Germans, both in this country and in Germany, hold the same opinion. The prevailing sentiment in Germany may

be summed up thus: The Germans are almost unanimously in favor of religious instruction, and almost unanimous in the belief that their present system is wrong and in need of the most radical reform.

So let us not feel that our situation is peculiar, for the whole world is wrestling with the problem. The question of religious instruction in state systems of education is one of the great problems of the present day.

Now the last point I want to make is this: I understood one speaker to imply, at least, that there was not any greater consensus as to morality than as to religion. It seems to me that if we look over the world we shall find that there is a vast amount of consensus as to morality. We can hardly find a single distinctly religious fact which will meet every one's approval; but how many moral ideas, how many of our laws, how many of our conventions have the acceptance of the great majority of all civilized people. How many men would deny that greatest principle of morality, the most advanced, that we should love our fellow men? On the other hand how can we possibly state a single distinctly religious principle or faith from which large numbers would not dissent? I say this because it seems to me that we must solve the problem in hand just by beginning on the common ground of morality. It is unfortunate the word morality has somehow got a bad name; let us say, if you please, begin with character, begin with life, begin with conduct, and build up and up, always striving for a greater consensus and rising toward the more spiritual, and so taking with us as far as possible not only those who are represented here to-day, Protestant and Catholic, but also, as we must, our Jewish fellow citizen and our fellow citizens who for various reasons, some good and some bad, hold themselves aloof from all religious beliefs. In any case all the work in state supported institutions must be confined to what commands practically universal assent in the community concerned.

PRESIDENT BRYAN

I wish to say with reference to what the last speaker said, that I was misunderstood. The people do retain a traditional consensus. What I said was that the professors of ethics do not. My judgment is that in the long run the people will stand, or fall, together.

THE STATE UNIVERSITIES AND THE CHURCHES

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Ladies and gentlemen: When I received the very courteous invitation of the committee to present a paper on this occasion, I accepted it gladly for two reasons. The first is that during the past fifteen years a group of men at the University of Michigan have been at work upon the problem of the relation of the churches to the state universities, studying it in its different phases and experimenting with different methods of solution as opportunity and means made experimentation possible; and this conference seemed to present a favorable opportunity to make ourselves familiar with similar work carried on in connection with other universities. The second reason is that as a result of our study and experience several of us have come to hold rather definite views, which we should like to submit to the consideration and criticism of those who have been working upon the problem in a different environment.

I felt that one coming from so far should not venture to present an address on so serious a subject without carefully writing out what he had to say. I essayed the task, and thought that in speaking of the state universities and the churches, I should endeavor, first of all, to formulate a general statement of the facts. As was pointed out this morning, we are confronted not with a theory but with a condition, and the first prerequisite of the solution of every such problem is an inquiry so far as possible dispassionate and comprehensive, into the facts of the situation for which the remedy is desired. When I came to put my data on paper, I confess that I was overwhelmed by the number of facts and considerations which in the past few years have come to the surface and which have a direct bearing on our subject; I found that in the time allotted it would be impossible to present the outline I had worked out. Throwing my manuscript aside, therefore, I ask your indulgence if I speak in the most informal manner upon one of the five main divisions into which the subject seems to fall, the present divorce between advanced theological and advanced secular education.

My ideal of a university is not unlike that so felicitously set forth this morning by Dean Duffy. A university which aims to represent, with more or less completeness, almost every field of human knowledge, and omits from the curriculum any recognition of that which is after all the background of all knowledge, must be considered incomplete. The uncompromising severance of religious from secular education is an experiment of the past few generations. The results, however, are already easily discernible, and without dwelling on the historical aspects of the case, we may ask ourselves frankly, what are the consequences, for the university and for the church, of

the complete separation of the advanced secular training from the advanced religious training, which we find in the state universities.

First we may consider the effect upon religious education. In this country the experiment has been tried, upon a large scale, of cutting off instruction in theology from association with instruction in sister sciences. In only a few instances is the theological faculty closely associated with faculties of law, medicine, and other departments of knowledge included in the university sisterhood. There are many consequences, but three may easily be apprehended and concisely stated.

It will be conceded, at the outset, that the lack of contact between the theological faculty and the other faculties of advanced learning, has had upon the former a narrowing effect. We hear much complaint of a lack of adjustment between pulpit and pew. It is not for the layman at this point to enter the field of the theological expert and point out the grounds of criticism in detail. We can all see, however, that if the theological faculties of the country were put side by side with the faculties of other departments of advanced learning, the stimulus of the contact would render their work both of research and of instruction broader, more profound, and far better adapted to the multifarious needs of our American life.

But, in the second place, our theological schools as a whole are suffering from a lack of facilities. This is a matter of common knowledge, but to illustrate at how great disadvantage the majority of them are placed in this respect it is only necessary to turn to the report of Commissioner Harris of the Bureau of Education for the year 1903; there we read that according to the statistics furnished by the schools themselves, of 153 theological seminaries listed in that year thirty-five had less than 5,000 volumes in their libraries, and eight more gave the number as 5,000. In some cases, undoubtedly students of these theological schools have access to libraries outside the institutions; but it must be remembered that in the case of the branches pursued in the theological seminary, the condition is altogether different from that of sciences of recent development, which have a literature more restricted in range and relatively small in quantity. The studies pursued by the student of theology have ramifications running out in every direction, and theological instruction which shall unflinchingly face the problems of the present day and adjust itself to modern thought, cannot be given without a large working library for faculty and students. Of these 153 seminaries, only seventy-two are recorded as reporting more than 5,000 volumes in their libraries. Sweeping statements generally need to be modified, and a just view would require a closer analysis of the figures than is here possible; but enough has been said to indicate how lack of resources must narrow and cramp the instruction of the theological

faculty which without ample equipment of its own is endeavoring to do its work in isolation, apart from university libraries and that stimulus which comes from association with other faculties.

Again, the narrowing effect of isolation upon the theological student deserves to be noted. The student of theology in an isolated school meets in dormitory and class-room only men working in his own field; and though perhaps endeavoring to make practical application of that which he has learned, and conscientiously pursuing his lines of work, he is excluded, for the three years of his professional training, from a university atmosphere. During those years of vital importance to his life work he is cut off from that broadening of the intellectual horizon, that expansion of sympathy and quickening of mental powers, which comes from the mingling of students of different professions together in their daily tasks and recreations, a phase of university education not least in importance among the formative influences that shape men for the largest service.

But if such are the consequences for the theological school severed from its normal relations, what, we may next inquire, is the effect upon the state university cut off from all contact with the faculty that represents the first among the professions in its molding influence upon the ideals of society?

The first consequence to be noted is the lack of the steady influence of the theological faculty upon other faculties. Grant the establishment upon the campus or near the campus of any university, under whatsoever name or auspices, a body of godly scholars whose whole thought is centered, as their special interest, upon the interpretation of the things of the spirit: their influence on the university, if not paramount in giving direction and emphasis to the spiritual element in all its work, will at least be sane, healthful, and uplifting.

A second result for the university is a lack of such influence on the student body. Those who are familiar with the inner life of the state universities will agree that from the religious point of view the danger at the present time is not that these institutions will become centers of propagandism against religion, nor that they will even become intentionally non-religious. How can such results be looked for when the faculties of the state universities and the non-state universities and colleges are recruited from the same body of men, trained in the same institutions; and when the percentage of church members and adherents among the students in state universities is practically the same as that in the large non-state institutions which draw their students from the same constituency? A small denominational institution will naturally have a large percentage of students representing the church which supports it; but according to a religious census taken a few years ago, the percentage of church members and adherents was about the same, for example, in the Uni-

versity of Michigan as in Princeton University. In matters of this kind size must be taken into account in dealing with statistics. The real danger in the real large universities, as in all universities where there is an intense intellectual atmosphere, lies in the tendency to "atrophy" of the spiritual nature. Minds become so absorbed with the details in a particular field of investigation or study that the things of the spirit are lost sight of. Thus in the three, five or seven years of close devotion to lines of work that do not come directly into contact with vital religion, perspective is often lost, and men begin to lose their hold upon the verities that form the solid foundation of the true life.

The third consequence for the state university is that this separation is contributing in no small degree to the decline in the number of candidates for the ministry. According to the report of the Commissioner of Education, in the year 1890-91 there were in the universities and colleges of the county, 40,089 men; in the year 1902-03 there were 69,178, an increase of nearly three-fourths. In 1890-91 there were in the schools of technology 6,131 men; in 1902-03 there were 13,216, these institutions having more than doubled their attendance in thirteen years.

In the year 1890-91 in all the theological schools of the country there were recorded 7,328 students. In 1897-98 this number had risen to 8,871. But in 1902-03, notwithstanding the enormous increase in the number of young men enrolled in the literary and professional departments of universities and colleges, the number of students for the ministry in all denominations had sunk back again to 7,372. Had the enrollment of students for the ministry kept pace with the increase in the enrollment of young men in colleges and universities, the number in 1902-03 would have been above 12,000.

Several causes have contributed to this result. We should not, however, attribute too much importance to the cause which is most frequently mentioned, perversion of our youth by Mammon, and the influence of the so-called practical education upon those whose natural endowment would fit them to do work in lines requiring a humanistic preparation. We all remember how, at the call to arms at the breaking out of the war in Cuba, college men arose everywhere and offered their lives. There never was a time in this country, I believe, when young men were more ready to give themselves to a life of self-sacrifice, to an altruistic motive, than the present. And if in the face of this condition the ministry of practically all the denominations has begun to suffer from a dearth of candidates so that it looks as if the religious bodies would within the next decade experience a serious lack of trained leaders, there must be other reasons. Among the more

The Religious Census of the State Universities and Presbyterian Colleges in the year 1896-97 pp. 22 and 48; see also *Atlantic Monthly*, Vol. (1897).

important of these, I am convinced, is the fact that upon the campus of the state university, as the men of the literary department and the numerous visitors from the lower schools pass from building to building, the law, medicine, engineering and other specialties are silently urging their claims and stimulating a choice, only the faculty of theology is always absent. Any direct appeal of the ministry as a calling to young men is eliminated from the atmosphere of the state university, because there is no faculty to represent it. The denominational schools of the country—be it said to their praise—have done and are doing a great work in the training of men for the ministry; yet so large is the proportion of eligible young men who now go to the state universities, and who as a result of their environment, when they are laying out their plan of life eliminate all consideration of the claims of the ministry, that the total number of students choosing this exalted calling, especially students of the first rank in ability, is in consequence abnormally reduced.

What remedy may be proposed? To approach the point directly, I offer for consideration the following resolution:

"Resolved, that this conference recommends to the religious denominations the consideration of the question, whether the theological schools in the region of the state universities may not be grouped about the state university to mutual advantage.

"And be it further resolved that the chairman of this conference and the President of the University of Illinois be requested to act as a committee to transmit a copy of this resolution to the proper ecclesiastical authorities for each denomination.

Criticism of what exists is useful only as clearing the way; after a certain point is reached constructive work is much more valuable. It is easy to point out defects; the test comes in the finding of remedies. We are all familiar with the truism that though individuals may work out an apparent solution of a sociological problem, men in masses move toward results in accordance with laws which are only imperfectly apprehended. A problem like that before us can hardly be solved by a single off-hand solution. Nevertheless, a definite statement in the form of a proposition may be useful in focusing discussion and we may properly turn to a consideration of the question whether the final remedy of the situation which we have met here to discuss may not be the planting of schools of theology about the state universities.

To this suggestion, which is by no means new, two objections may be urged. The first is that the immediate contact of the theological faculty with the atmosphere of secular instruction will diminish faith and will result in a demoralization of religious teaching. Have we thus learned of religion, that faith is born of ignorance? Will the churches be afraid to have the foundations of belief tested by putting

a theological faculty beside the faculties of secular science? No! Never did men more clearly perceive than today that the religious faith which stands for all that is true and sacred in the interpretation of the divine mysteries in relation to human life and duty, will find itself reinforced and sustained by the closest contact with secular science. Are nature and revelation from different sources? What God hath joined together let not man put asunder.

The second objection is that denominational rivalries would cause unseemly scenes; that sectarian jealousies would make impossible any real coöperation between faculties of theological schools having different points of view, and would largely neutralize their influence. Is it not evident that the religious denominations tend more and more to emphasize points of agreement rather than of difference, and to work together for common good? To judge from what I have seen of the manifestation of a spirit of brotherhood among workers of all shades of belief at Ann Arbor, theological faculties grouped around a state university and facing the grave responsibility of representing the spiritual side of education in a microcosm of secular thought, would develop a solidarity of effort and a mutual helpfulness beyond a degree ordinarily thought possible today.

Several results, it seems to me, would follow from such an association of advanced religious and advanced secular education. The first is economy of administration, effecting on the whole no inconsiderable saving. How in the great majority of theological schools the work of instruction is hampered by lack of resources, those best know who are carrying the burden and heat of the day. If the theological school is planted beside the university, the expense for instruction will be materially reduced. Greek, Hebrew, and other studies can be pur- by representatives of different denominations in the university at a much smaller cost than in separate institutions. Students as well as professors would find the university library of the greatest possible assistance; and in still other ways there would be brought about an enlargement of the facilities of instruction accompanied by a reduction of cost.

A second consequence would be a normal development of the sciences directly connected with theological work, in an atmosphere of freedom. One of the speakers this morning referred to the perfunctory character of the instruction in religion in certain foreign schools. The only true service of the spirit is that which is rendered voluntarily. Such a *modus vivendi* as that proposed would relieve the theological school from the difficulties which have arisen from the association of church and state; it would make possible the best results in the adjustment of religious teaching to the conditions of modern life.

Finally, experience shows that educational reforms work not from the bottom up, but from the top down. The placing of groups of

specialists in all branches of theological study about the state universities under such a *modus vivendi* would be the first and most important step toward the solving of the momentous problem of the relation of religious to secular education in institutions of all grades. The trend of discussion shows an increasing dissatisfaction with the present conditions. Special study of educational questions by competent men who can give their best thought to a particular phase is the order of the day, and reforms have again and again worked down from the state universities and leavened the entire school system.

Within the past few years the denominations have awakened to a realization of the truth that the state universities are strategic points, and many efforts are being put forth, through various forms of religious organization, to bring a wholesome influence to bear upon the lives of their students in the period which is most critical, intellectually and morally. Such efforts are worthy of all encouragement. No working plan has so far been devised, however, that fully meets the need; and the problem of supplying a religious atmosphere to advanced secular education will probably not be fully solved in this country until it is attacked through a working union of theological faculties in close association with state universities.

THE OBLIGATION OF THE CHURCH TO ITS ADHERENTS IN THE STATE UNIVERSITIES

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I. *The Need and the Opportunity.* The obligation of the Church lies in the need and opportunity afforded by the state universities.

In the first place, the adherents of the churches are in these universities in large numbers, and are bound to be there in increasing numbers. Whether the churches would or would not prefer to have the situation just as it is, is quite aside from the point; for they need to recognize that even if no account is made of the students in the college departments of the state universities, there remains a very large number of adherents of the churches who naturally must get their technical or professional training in connection with the state universities.

In the second place, these students, whether in attendance upon the college or other departments of the state university, are, in the nature of the case, *among the picked men and women of the country*, sure to have influence in the life of the nation quite out of proportion to their numbers. If the Church means, then, to be a powerfully influential body in the life of the country, it cannot more surely achieve such influence than by making certain that it gets strong hold upon these picked men and women at the educational centers.

In the third place, the need and opportunity of the churches in the state universities is to be seen in this: that the students in them, like the students in all other colleges and universities, *need religious help, stimulus, and association in unusual degree*. Students stand at a critical time in their lives. They have passed from their homes into a changed environment, and are subject to a flood of new ideas. These two things together require from them that they should be able to gain a position of self-dependence, and should be able to make considerable adjustment and reconstruction in their thinking. Many of them seem, at least to themselves, to be confronted with the serious question, whether it is possible to keep their religion at all? They need the earnest and intelligent help of their churches.

In the fourth place, these college and university students should naturally become some of the *most important leaders* in the Church itself. For its own sake, therefore, the Church ought not to neglect them. Such neglect may mean that the Church may wholly lose these natural leaders, or find them later much less helpful than they might easily be.

Again, the university stands for expert leadership in all departments of thought. If, now, *religion* is to hold its own in the life of the student, it, too, *should have expert leadership*, of a kind to compare favorably with that in other fields of thought and study in the university. The Church, therefore, cannot simply abandon this work, any more than the university could abandon chemistry, to voluntary and student agencies, however good these may be in themselves. She must do something toward furnishing, herself, genuinely expert leadership for these student thinkers in the facing of their personal religious problems. There are few places in the entire work of the Church where she need to plan more wisely or execute more energetically.

It is also to be said that if the Church has a mission at all, she is sent to *minister to the life of the nation* and of the world. If she fails to do this, she loses her very reason for being. Now, the college and university men and women are the natural social leaven of the nation. It is imperative for the country that they be men and women of the highest character, convictions, and ideals. And it is the very end, at least of college training, to make sure that this is the case. If, now, the state university is at any point hindered, in the nature of the case, from the full use of the religious motive, there is all the greater reason why the Churches should here feel peculiar responsibility. For if the Churches believe in the fundamental need of religion for the freest and largest ethical life, they must recognize, in the case of the state university, a peculiar demand upon them—a demand in some respects even more important than that made by their own denominational colleges, where the inside influences in the religious direction are

stronger and may be more freely used. Here, in the state universities, is the place, and the student period is the time, for the churches to do, perhaps, their most effective work.

And, once more, it is the very genius of Christianity to *touch a few lives powerfully, and to make these lives leaven for the rest.* The churches would be doing hardly less than neglecting their characteristic opportunity, if they failed to touch powerfully these nerve-centers of the nation's life. For, from out of these state universities are to go a large number of graduates who are, in no small degree, to determine—aside from the ministry—as editors, lawyers, physicians, engineers, and industrial leaders, the tone of the communities into which they are to go, toward the religious and ethical life. They are to decide whether that tone is to be contemptuous, indifferent, tolerant, convinced, or enthusiastic.

For all these reasons, then, it is high time that the Church awoke to the fact that the state universities offer an almost unrivalled opportunity—an opportunity that may well challenge their strongest and most enthusiastic efforts.

II. *How the obligation is to be met.* When we turn from this statement of the obligation of the Church to its adherents in the state universities to ask how this obligation is to be met, it must be said, I think, first of all, that probably the largest part of the work of the Church here must be, after all, in *helping universities to see what they themselves can well and wisely do.* For the best outside agencies can never take the place of the internal ideals and associations of the university itself. If those who believe in the highest ethical and religious ideals are not concerned to see that the universities awake to the largeness of the opportunity which is theirs, even upon the strictest construction of their constitutional policies, comparatively little will be accomplished. And here we may build with great confidence and hope upon the fundamental psychological principle of the unity of man. If a man is, indeed, as Sabatier maintains, "incurably religious," that fact is sure to come out somehow, in thoroughgoing training of any kind.

And, first, the state university can insist that, just because it is a state institution, it must be a preeminently law-abiding community. It has an opportunity to cultivate directly, in the course of an education what is the express gift of the state, a *state and citizen consciousness* that is greatly needed, and may in time exert a strong influence not only upon other colleges and universities, but also upon the general community. Have the state institutions sufficiently seen that every decent motive should call for scrupulous regard on the part of their students for civil order and complete obedience to the law? The very peculiarity of the situation within the state university should make it possible to cultivate a positive enthusiasm toward the state, like the

enthusiasm of a Japanese soldier's honor. It is not enough that the president of a state university should pay, for example, for restaurant property that has been smashed by student rowdies. The state community is rather to be an example, in these respects, to all other communities. No institution of learning needs to be more clear that we cannot wisely combine the liberty of the adult with the irresponsibility of the child. Now, respect for law is fundamental in all self-control, and therefore in all developments of character, and is closely akin to a true religious reverence. If the state universities would simply throw the whole weight of their influence in favor of becoming preeminently law-abiding communities, a very great contribution, therefore, would be made in the entire higher life of the nation, which suffers to-day in remarkable degree from this lack of respect for law.

In the second place it is peculiarly open to the state university in a republic, to cultivate within its student body a pure democracy that shall stand against all forms of aristocracy, of privilege of any kind; against the aristocracy of sex, of color, of wealth, of the clique, and as well against all interference with the liberties and rights and self-respecting dignity of other men. The state university belies its calling if it fails to be, in rare degree, a place where a man is estimated for what he truly is, and where the members of the university community recognize that they are members of one another, and need one another. And they can hardly be true at all to their state connection, without developing, in marked degree, among their students that *willingness for unselfish leadership* which is absolutely essential to a true and growing democracy. Just so far, now, as the state university does succeed in producing such a pure democracy, it is making, in my judgment, a *direct religious contribution*. For it is bringing to pass within its own borders, in considerable degree, that "civilization of the brotherly man" which is the very essence of the Kingdom of God. A man or institution that is in thorough earnest to bring to pass the civilization of the brotherly man is doing more than can easily be estimated to make it easier for men to believe in a God of love.

In the third place, it belongs, one may rightfully say, to the state universities even more than to the private institutions, to insist on *good morals as training to good citizenship*. The state cannot justify to itself its expenditure upon these universities, except upon the ground that they have a distinct contribution to make in the development of good citizens. They are not to be supported from any other point of view. We cannot too often remind ourselves of that truth which has recently been so vigorously reiterated by President Butler before the students of Columbia University: "This university and all universities, in season and out of season, must keep clearly in view before themselves and the public the real meaning of character, and they must never tire of preaching that character and character alone

makes knowledge, skill, and wealth a help rather than a harm to those who possess them and to the community as a whole." It is a little curious, when one examines the matter from the point of view of the simple importance of self-preservation on the part of the state, that it should never have been thought to be true that the state universities might be more careless than private institutions in this matter of the insistence upon good morals. That is not funny in college men, wherever it occurs, that would be regarded as disgusting dissipation or unbearable rowdyism and disturbance of the peace in workmen. Is it too much to ask that our state institutions should be—what they might easily become—leaders in developing something like truly knightly ideals on the part of their student bodies, leaders in developing college men who shall approximate, at least, to a fulfillment of Newman's famous definition of a gentleman? Now, for the state university to be dead in earnest in this development of moral character, is to deepen inevitably at the same time the student's capacity for religion.

Furthermore, the churches may help the university to remember that it not only has a perfect right, but in its fulfillment of the trust given it by the state, it has the paramount *duty of insisting on a high personnel, atmosphere, and spirit in the university*. In my judgment, this is the one great need, lacking which all things are lacking; having which the essentials are all present. Both character and faith come primarily—one may not forget—by personal association. Nothing will make good this lack. Without these, pedagogical methods, textbooks, and courses of study are all but "thunder and comedy." And there is nothing in the separation of Church and state which may require the ignoring of the highest qualities on the side of character and ideals in instructors. In the university, the state is carrying on instruction of various kinds on the ground of its value to the state. It has, therefore, not only the right, but the duty to insist that the best development of its youth shall not be jeopardized by bad character and low ideals in the instructors. And where the character and ideals of the instructors are what they ought to be, it is impossible that the university, any more than the public schools, should be properly called godless. In the words of Fichte, "a godlike life is the divinest proof a man can give of the being of God."

Again, the churches may do something to help the university to see the contribution which it may make to the higher life of the nation in its *strict scientific teaching*. For, just so far as the genuinely scientific spirit is preserved in the university, there will be, first, *open-minded, eager love of the truth*, and *humility* toward it, that means hardly less than the fulfillment of the first beatitude. This same strict scientific spirit should lead, also, to *willingness to recognize all data*, in the interests of the entire man, and not merely those data

which it is most easy to bring into a mathematico-mechanical view of the world. If we can only keep unsullied this absolute openness to all the light, the ideal interests need have no fear. But one may well protest against that "sham and puerile kind of heroism," to use Lotze's language, "that glories in renouncing that which no one has ever any right to renounce." Scientific investigation, indeed, for the very reason that it aims to push forward in its pursuit of truth as rapidly as it can on the basis of all the facts already ascertained, is in its very essence adopting the fundamental principle of "treating the truth as true." And this very thing, I cannot forget, was the definition of my own old college president of the essence of faith. In fact, it often seems to me that if our universities could only carry through with complete and radical consistency, the scientific spirit, that spirit would be found to be most closely and inevitably allied to the humble, reverent, obedient spirit of religion.

If, now, the state universities would be in dead earnest in the points already mentioned—in insisting on a pre-eminently law-abiding community, in persistently cultivating a pure democracy, in demanding good morals as training to good citizenship, in maintaining the highest personal character and ideals in the personnel of faculty and officials, and in complete loyalty to the strict scientific spirit—I have no doubt that the problem of religion in the university would be largely solved. Still, it may be worth while still further to suggest—though in my judgment far less important—that with the strictest interpretation of the separation of religion and the state, the universities might yet most appropriately *offer directly fundamental courses in the philosophy, psychology, and history of religion*, in which the religions of the world and the Old Testament and the New Testament should be given their simple, legitimate place, and their great involved personalities duly appreciated; in which the religion of the modern civilized world would not be considered as less worthy of knowledge than that of the Egyptians and Chinese; and in which such literature of power and of character-producing energy as the Bible has abundantly proved itself to be, should not be ignored. "Indeed," said Professor Budde, after affirming most completely the necessity of the scientific method in the study of religion, "the more we extend the range of observation and the deeper we penetrate into details, the more evident will it become that the reality of religion is incontestable and its vitality indestructible.

Perhaps the whole range of the possibilities of the universities, as concerns the ethical and religious life of the student, might be put in this way: the really fundamental temptations of life—underlying all others of every kind—seem to me to be, (1) the temptation to abuse one's trust, (2) the temptation to fall below one's highest spiritual sensitiveness, (3) the temptation to seek relief in change of circum-

stances rather than in change of self, (4) the temptation to disbelief in men, and (5) the temptation to disbelief in God. There ought to be no question that against all of these, certainly, except the last, the state university may rightfully cast its full strength. For, in very self-defense, the state can hardly do less than to require that the spirit of its institutions of learning should persistently cultivate in its students (1) loyalty to trust, (2) truth to their highest spiritual sensitiveness, (3) determination not to replace the needed change of self by an attempted change of circumstances, and (4) growing faith in men. Out of these, if the university attempts no more, will, with practical inevitability, grow the spirit of trust in God.

In all these possibilities we have simply been building upon the principle of the indissoluble unity of man.

But the theme assigned to me looks, I suppose, still more directly to the question, what the churches themselves can do to meet the need and opportunity afforded them in the state universities? And here, it seems to me that we must say that the greatest service the churches could render of themselves would be simply to come to *some adequate recognition of the real need and opportunity*, and to gird themselves to meet them.

The first condition in any such adequate meeting of the obligation upon them would be, it seems to me, a spirit of hearty coöperation between all the religious and Christian forces in the university community, in order to present a powerful, united front and bring the full force of fundamental convictions to bear on the student body. And this needs the most careful guarding. The principle should be, unity to the farthest degree possible—division only where unity is for the present unattainable.

For the individual denomination, the first responsibility, doubtless, is the maintaining at these university centers of a notably strong pulpit. It may be doubted whether there are any situations in the country where such a pulpit is so much needed. These preachers to university audiences need to be, in the first place, genuinely scholarly men, and yet much more than mere scholars. On the one hand, (1) they must be alive to the modern world, and to all its questions as they come to the student in his college and university years. And, (2) they need to stand very close to the young, and to have some experimental and sympathetic feeling for their difficulties. Only so will they be able to meet these difficulties with real and helpful satisfaction. On the other hand, (3) these preachers at university centers must be genuine prophets and seers, with power to see the great fundamental Christian truths in their full meaning and power, so to re-think them and re-state them in modern terms as to make them for their audiences unmistakably *real, rational, and vital*. Above all, they must know how to make real to the young creature of Christ, that they may

come to share in his feeling and spirit and purposes, as the great German theologian, Herrmann, says of himself:

"The writer's power is insufficient for such speech concerning Jesus as should make His portrait alive and powerful in the soul of the reader. When a man can do that he ought to cease to be an academic theologian; he should hasten as a preacher of the gospel to give to the community the best thing that can be given to it."

Men like Phillips Brooks are, of course, not numerous; but some such work as he was able to do for students is perhaps the greatest work that can be done by the churches for university students. So imperative is this need of a notably strong pulpit in the university centers, that those denominations are certainly wise that make the meeting of this need not merely a matter of local, but of denominational policy and enterprise. For that church which gets persistently the strongest hold on the college and university men and women of the nation is sure sooner or later to lord it in the thought and life of the people as a whole.

Besides this need of a modern and prophetic pulpit, there is the other still more individual need of *personal touch*. In his chapter on the will, Professor James has told us to how large an extent it is true that we catch both our courage and our faith from others. And at no time more than in these growing years of his intellectual life does the young man or woman need this *life-giving touch of courageous and believing personalities*. This is the one great prerequisite. It is thoroughly worth while for the individual church at the university center—or the denomination, if the church cannot singly do it—to provide for *close pastoral relation* for the students naturally falling to its care, and to do all possible—through perhaps a guild or parish house—to furnish for them some real church home, and to meet, partially at least, their social needs. The enlistment of such students, also so far as is feasible, in some definite work of the church, even though that work may be comparatively light, would be a distinct gain.

And, beside the strong pulpit and the real pastoral relation and the church home, each church at the university center ought to provide in some way *Bible study of the first value*. This might be done in connection with the Young Men's and Young Women's Christian Association Bible courses in the university by offering classes, or undertaking the leadership of such classes in the Association courses in connection with the church. But beside that, the church ought itself to be doing something so distinctly superior in the line of Bible study as to get a strong hold upon the students to whom it ought naturally most to appeal. No movement in the modern religious life of the students is more hopeful than this Bible study movement. And the young men and young women cannot be brought face to face with the careful study of the Scriptures without permanent results in

thought and life. A good deal of valuable personal conversation on great religious themes can be quite naturally brought out in this way when it could be achieved in no other. It ought usually to be possible for a church at a university center to enlist some strong member of the university faculty itself in the leadership of some such Bible study work. It can easily be seen that where that can be done, a double influence is exerted; for the influence of the man's position is felt, even by those who never find their way to his Bible study class.

Where the denomination undertakes, in addition to the local church, to provide something like pastoral care of its own adherents in the university, it may perhaps most wisely combine with that—as some of the denominations have already done—the endowment of some form of *Bible Chair*, so that there should be open, particularly to the students naturally belonging to its care, but also to any students, that expert leadership in the study of the Bible to which reference has already been made. In such a case the need of some center for the work might very naturally lead, as it has already done in some places, to the establishment of some form of church house, in which might perhaps be gathered as a home some proportion at least of these students. These latter means, however, seem to me not only much more costly, but really less necessary, and I am inclined to think less wholesomely influential in the life of the students than those agencies which can be somewhat more directly and naturally connected with the representative church of the denomination in the university town. It does not seem to me to be of the first importance that the student should never get out of touch with the peculiar influences of his own denomination. It may quite conceivably be well for him that he should not be so closely and continuously under this supervision. The broader influence of the general church and Christian life of the community may actually do more for him, even from the point of view of the denomination, than would the more closely centered influences of the denominational church house. I have, besides, the strong feeling that there is clear gain in keeping the sources of the religious life of the student as far as possible just those that they may be through the rest of his life; and I should, therefore, myself, prefer to see the denominational influence exerted largely through its representative church, rather than in more independent and costly, though more imposing fashion.

The only absolutely vital things for either the church or the university to remember, in the work that it undertakes for students, are, (1) the indispensableness and primary necessity of *personal association*—the inspiration that comes from the personal message and the personal life; (2) the psychological imperativeness of some form of expression for the highest ethical and spiritual life of the student; (3) the recognition, both in this association and in this expression, of the

student's own choice and initiative; (4) the clear discernment, also, that the life of the student is a unit, and that all sides of the university life to which reference has already been made, do count most strongly for the religious life, though they are not so named, and that, therefore, the religious work of the churches is not to be regarded as something simply mechanically tacked on to the work of the university, but naturally and organically knit up with it.

DISCUSSION

JAMES DAVID MOFFAT, D.D., LL.D.

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I have been asking myself, how does this problem come to be so important at this time? It seems to me that if I can find an answer to that question it may throw some light upon the problem itself, and later upon the question—what is to be done to meet it? My answer is that this problem arises in our country because the state universities are something more than universities, and somewhat less than the ideal university so often held before us for our admiration and our inspiration. In our universities are found some young men and some young women who are pursuing post-graduate studies, but more who are pursuing college and even secondary studies. They are largely young people from fifteen to twenty-two years of age, whereas in the ideal universities you would find young people from twenty to thirty years of age who had completed their college course and were engaged in specializing in their chosen departments, or in preparation for their professional or technical life. If our state universities were exclusively for post-graduate study we might give to the faculty ample liberty of teaching, and might trust the students to investigate all problems for themselves, to go from one professor to another, to look into the sources and the grounds of this position and that one, and determine for themselves, as sooner or later every human being must determine his own religious creed.

But the young people gathered together in so many of our state universities are away from home for the first time. They are away from their customary church privileges. They are at what is called the impressionable age, and, what seems to me far more important as a characteristic than that, they are great respecters of authority. In the earlier stages of education there is necessarily an appeal to authority. The elementary principles of many branches of human knowledge can only be acquired by the study of a text-book and careful attention to the teacher. Those of us who are connected with college education, properly so-called, are endeavoring all the time to furnish the transition between respect for authority and independent personal investigation; and it is my belief that every college course ought to be

so shaped that there may be a genuine transition from the collegiate period of study to the university period and method of study, properly so-called. I should feel, in sending my own son away at twenty-one, that he must choose for himself. I do feel that until he is twenty-one I am under strict obligations to supervise his education, not alone his secular education, but also his religious education. Under these circumstances I think it cannot seem strange to the authorities of state universities that parents all over our land have been somewhat concerned about the religious development of their children, especially when they have been assured that university instruction in religion is entirely colorless, or that it is sometimes indefinite, or even antagonistic to the Christian faith. At the very best, these young people must come in contact with opinions and facts and references that are more or less inconsistent with the fundamental beliefs in their religious life, and in such circumstances the spirit of a respected professor, whatever his branch of teaching, the absence of a word or the appearance of a smile, may create a doubt, a difficulty that years may be required to remove. Religious people understand this and wish to guard against it, and they are asking that there shall be incorporated in the university or connected in some way with it, that which may possibly counteract this influence and tendency to an irreligious life.

Now, how are we to meet this practical problem? We are endeavoring to find out. It occurs to me to say, first, that I earnestly believe that each denomination should look after its own children. As a Presbyterian, I feel that it is a duty of my church not to be indifferent to the surroundings, the environment of the children of the church during the ages from fifteen to twenty-one. We should be satisfied in our own minds that something is being done, not so much to keep them within the membership of our own church, as to keep them within the membership of the Christian church. Our denominations are becoming less and less sectarian, but still we feel that we have a common interest in our common Christianity, and we tremble for our country if the educated men and women of our country shall hereafter be more or less indifferent to the great claims of the Christian religion upon those who hear of it and who have endeavored, for the time at least, to respect its demands. The Presbyterian church, as was said here this morning, took steps a year ago to see if we cannot do something toward looking after our own sons and daughters in these state universities; and the plan that is at present shaping itself is to employ some one person especially fitted for that work, to operate in the university in connection with the Presbyterian local church and pastor. The pastor alone is unable to meet all the requirements of the situation. He has his charge and his adult membership to look after. But with the assistance of some one specially selected for the purpose to act in a measure as a pastor, it is hoped that some sort of influence may be

brought to bear upon the boys and girls away from their homes to make them feel that they have a church home near at hand, and to give them such assistance in their religious lives as they may need.

A great deal that has been said here today has reference I think to the higher religious education, to the settlement of the great problems which are always arising and demanding settlement. But what is needed at the early age of which I now speak, more than anything else, is an act of commitment on the part of young people. To what? to their own present sense of an obligation to God and to Jesus Christ. That is of more importance than the knowledge of all history and of all philosophy and theology, and that is something against which no human being, whatever may be his creed, can raise objection; for every human conscience attests this fact, that human beings are under obligation to do for the time being what they believe to be right. The step that takes a young person out of the world and into the church is that particular step. It determines the character; it will have its variations; later on, new knowledge will be acquired that will create new aspects and new modes of construction; but the character is fundamentally determined when a human heart once surrenders to the law of right. We Christians believe that law of right has been laid down for us by Jesus Christ. We feel that if we can have young people during the process of their education committed to Christ in all loyalty, we can turn them loose in the world to hear what the world has to teach them, to come face to face with every real fact, and to examine the arguments to be presented.

I think the Christian people of our country have a right to demand that the state university shall not be hostile to the Christian religion, that its professors shall conduct the instructions of the class room in a reverent spirit, that they shall not ruthlessly trample upon the traditions that have been learned in Christian homes, out of which this great nation of ours has been builded. Somehow, every university and every institution in this world of ours, must sometime settle the question whether it is Christian or anti-Christian, in its spirit or atmosphere. There is no neutrality in this war, because this war is for the government of God. However much Christian people differ in creed and in custom they are all working to bring about a universal obedience to the Divine commandments, and in the pursuit of this end they have a right to sympathy and to a measure of coöperation from every educational institution that does not stand for atheism. But having committed our country to the policy of the separation of church and state, it seems to me that it follows that the state university should seek to have the churches look after the religious culture of their own children, rather than to attempt to supply that need; for the endeavor to avoid all sectarian bias must leave the religious teaching too colorless to be effective. The fear that the policy I am

advocating may lead to the building of a cordon of denominational houses around the campus is not well grounded. The denominations will not all build around every state university, but only where their interest are great enough to demand it. Where the number of their children is so small that the local pastor can look after them, or where they may be committed to the care of other churches "near of kin," the expense of a separate house will not be incurred.

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To those of us who have attempted to wrestle in a serious manner with the betterment of mankind, it is becoming increasingly plain that no great reform does or can stand alone. The problem of religious education is certainly one of the most vital to the progress of humanity, and rightly deserves the prominent place given to it on this occasion. The problem of religious education in the state universities is nowhere more important than in this Mississippi Valley, where the state university is beyond a doubt the dominant type of higher education. Whatever may be true of the eastern portions of our country, and whatever great non-state institutions may flourish—it still remains true that in the Mississippi Valley, containing the largest homogeneous population, speaking one language, and under one flag, in the world—the state university is to-day, and is sure to remain, the institution that furnishes the higher education to a majority of the people of this imperial territory. That being the case, the civilization, not only of this region, but of our whole country, will be colored largely, if not finally determined by the character of our state universities.

I think it fair to assume that the state university originated primarily in two ideas. The first was that our people might obtain a less expensive and more universal higher education than was possible at that time in the denominational and non-state institutions; the other was, I believe, an attempt to free our higher education from the narrowness of the dogmatic instruction and attitude of the denominational colleges of that time. The reaction, leading to the formation of the state universities, so far as connected with both of these ideas, was wholesome. The denominational colleges had set up a false opposition between science and religion. In the then existing temper of the public mind, the public preferred intellectual freedom to dogmatic narrowness. The result, however, of such a reaction was to lead the state universities to accept the challenge thrown down by the church schools, and to assert that they would take the intellectual or general education, and let the church colleges take the religious education—an idea impossible of realization for either party.

The position was untenable for both sets of institutions. The

church was as far wrong in attempting to maintain institutions which set up a barrier against the progress of science as the state institutions were to assume that they could develop independent of and separate from religion. The competition of the two kinds of institutions for students and financial support has, so far as our present purpose is concerned, been beneficial to both. The church colleges have liberalized, and have realized that although education does not consist wholly of instruction, no amount of piety can be, or will be considered, an off-set, in the public mind, for genuine learning and efficient teaching in the ordinary sense of the word. On the other hand, the state institutions are beginning to realize that their position is equally unsound, and that, being in a Christian civilization, *that* so-called education is false, lame and impotent, which fails to develop the whole man, intellectually, ethically, and spiritually. In other words, education is a development, and a development of the whole man, a fitting of one for living in a religious community, in a Christian civilization, and such education cannot be attained unless the spirit of religion pervades and dominates the whole institution. The result of this awakening on both sides has been not only beneficial to all, but it has tended to a very great degree to bring the institutions nearer together in their spirit and in their methods.

But the problem of religious education and of the relation of religion to education is far from a satisfactory solution in either kind of institution. The real solution must be substantially the same in both classes of institutions, the charge that the denominational college was not performing its whole duty in regard to religion has led to the setting up of a chair of religious or biblical instruction in many of the colleges. Although the motive back of this is admirable, the efforts to carry out the plan have not so far, I believe, met with the success hoped for. The original advocates of such chairs are now calling for additional remedies. However excellent the man, and however pure the motive in creating such a department, the effort appears to rest upon fallacy, the same fallacy upon which state institutions proceeded when they assumed that so-called general education, or intellectual education, consisted primarily of instruction, and ought to be, and could be separated from religious education. Human life is a unit, and, as Professor Coe has remarked, religion is not a separate department thereof, nor can religious education be promoted wholly or chiefly by setting up a department of instruction for it, as you would set up a department of chemistry or philosophy. The effort to solve the problem in this way savors too much, at least in the public mind, of proselyting, of dogmatizing, and of formalizing. It lacks the vital element. It is impossible in this time of increasing freedom of election of studies to prescribe courses in such a department of biblical instruction for all students. If that cannot be done, the effort at best

would reach but a relatively small part of the total student body, which, in and of itself, condemns this as a chief solution of the difficulty. Even if the courses could be prescribed, the case would be no better. You could make students attend the courses, but you could not educate them religiously or cultivate their spiritual life thereby. One is not made religious by a knowledge of religious facts or history.

This leads me directly to the subject in hand: How can the state university solve the problem? As already indicated, I believe the solution must come exactly in the same way in the two sets of institutions. The practical working out of the problem, however, is likely to be somewhat more difficult in the state university because of the theory on which the state universities have so long acted. Religion is not maintained in our higher educational institutions, of any class, by formal instruction on the subject. It must come in both cases by christianizing the whole atmosphere of the respective institutions, and this brings us to the most important element in all education; namely, the personality and religious character of the corps of instructors. I do not look to see a great development of the attempt, already carried out in a few instances, to establish denominational lectureships and professorships, or dwelling halls or colleges in the state universities. These are all subject to exactly the same dangers and evils as the creations of special departments of religious and biblical instruction in church schools, and that settles the problem. They not only appeal to relatively few out of the total student body, but they tend to emphasize the purely denominational and sectarian elements, and to become purely formal, instead of reaching the essence of the problem by applying the principle of real development. At best, they can do nothing but give instruction to a handful out of a multitude of students. The attempt to substitute the husks of denominational dogma for the essence of personal religious life must always fail.

It is not probable that the different branches of the Christian church will become one body in organization; nor is it desirable that they should; but it is desirable from every standpoint that denominationalism should not be substituted for religion. It is proper that children of people belonging to a certain denomination should be instructed in the history and tenets of that denomination. There are things, however, in my opinion, that are out of place in the state university, and, generally speaking, of the higher educational institutions of all sorts. The day is past when the students of any important college or university all belong to one denomination, or when the managing bodies wish them to belong to one denomination. Therefore, to lay great emphasis on this matter in dealing with the students is not only to do a wrong to a part of the student body and to substitute the husks for the kernel, but it is to introduce a disintegrating force, when what we most need is to unify and vivify and energize the life of the

whole university by the direct appeal of the best type of mature religious life to the young life of the student. The problem before us is a problem of the teacher. When the state universities, without for one moment lowering the purely intellectual standards and the special qualifications in the different branches of learning, see to it that none but men of religious character, who respect and reverence things sacred in church and state, are put into the teaching corps, the problem is solved, because the atmosphere about the place will soon take on the color of their lives, and the immature and unformed student body, by the unconscious process of absorption and development, the contact of life with life, and soul with soul, will reflect the lives and characters of the teachers about them.

What is true of the state universities is equally true of the denominational institutions, although in view of the tradition and all the history of the past, I venture to believe that the denominational institutions are more likely to realize the necessity of higher intellectual qualities and special attainments than the state universities are to realize the impossibility of separating the secular from the religious, and the necessity of choosing men who respect the religious ideal. Most of our attempts, heretofore, in institutions of both classes, have gone on the principle of the late senator of the United States, when he declared that the ten commandments have nothing to do with politics. Ten commandments and religion, but not denominational differences, have to do with education of every sort, whether in the denominational school or the state university.

If we would send out from our higher institutions of learning men who would stand four-square, with their minds and hearts bound to the divine plans, with their intellects quickened by the assurance of their divine son-ship, with their whole education vitalized by the atmosphere of religion, we should soon bring a pressure to bear in choosing the governing boards and the faculties in our state universities that would solve this vexing problem. At the same time we should solve the problem of corruption in politics, and of the even more wide-spread and degrading graft, thievery, heartlessness, and corruption in business affairs. The time is past when general education can be separated from religious education, or when politics can be separated from morals, or when private business and public business can be considered subject to different ethical codes. The evils from which we suffer in church and state are directly traceable to this attempt at separation. The attempt has issued in a wide-spread belief that dogmatism is religion; the next step is to the belief that a man who gives money to a church, who attends church service, and who says public prayers, can behave in Wall Street as though there were no God, and as though religion were a thing to put on and off at pleasure, and that it ought to be put on for state occasions and Sunday only.

Let those who desire to preserve and develop the religious life of their sons at the state universities bestir themselves to see that no officer of the government or instructor is elected or appointed but such as they would wish their sons to emulate. Let them next see that voluntary religious services are conducted here by men of different denominations and of such spiritual power and leadership as to sink the questions of their denominational affiliations into their proper place of relative insignificance. Let them strengthen, broaden, and liberalize the college Christian Associations and encourage the students to take an active part in the doing the will of God by helping their fellow men by means of the various forms of practical philanthropy and religious work. Then the epithet of "Godless" will soon cease to be applied to the state universities. Then, too, our young men and young women will be developed religiously and the respective denominations will be actually strengthened by the pouring back into them yearly from our state universities an ever broadening stream of vitalized, spiritualized, trained, religious character for which alone the denominations ought to exist.

REVEREND WILLIS G. BANKER, D.D.
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My standpoint differs from that of the speakers who have preceded me. They are educators, and I am a pastor; but my pastoral experience is somewhat distinctive in that most of my ministry has been in intimate relation with a state university, from which comes a considerable part of my congregation. Of course, the university atmosphere is an element in my thinking on the subject.

On the whole, I think our young people are wiser than their advisers, at least in our Western country, when they prefer the university to the college. The university offers advantages which the church college does not and cannot offer. Of the fifteen hundred and thirty students in Kansas University, eight hundred and sixty are in the technical and professional schools. They are preparing for industrial life. Some may sneer at bread and butter education, but the fact remains that all cannot choose literary careers. Somebody must open the mines, build the railroads, and manage the factories; and this somebody must have technical training.

But there are six hundred and seventy students in our University College of Liberal Arts,—pursuing the same courses which are provided by the church schools. Would they enjoy better facilities in the church schools? I do not think so. Aside from the fact that there can be no comparison between the two, as to equipment in faculty, library, museums, etc.; aside from the cultural value of larger environment in the university, there seems to be a fundamental defect in our Western

church schools which prevents their doing as good work as the university. By the very terms of their foundation they are bound to promulgate certain ideas. They exist primarily for the maintenance and propagation of certain views of truth. Now whatever else that may be, it is not education. Education is the opening up of the soul and the drawing out of its powers, by bringing it into contact with all forms of truth. The university is free to do this, as the denominational college is not.

I know of no specific commission held by the church to conduct institutions of general education. It would seem to be the natural and proper function of the state. We have conceded this in primary and secondary education. I believe we should do so in higher education. The Church inaugurated education, not because it was her proper function, but because she is a missionary and herald of every good thing. The State was unconscious of her educational function, and left it unfulfilled. The Church stepped into the breach, took up the neglected duty of the State and discharged it. It was her right and duty to do this until from her the State could learn its duty and relieve the Church of the burden of general education, that she might have her forces free for her own specific work. Indeed she has an educational function which is specifically hers. By the very terms of her being, and by the specific commission received from her Head, she is charged with the duty of religious education; in fact, she is the only social organism charged with that duty.

From this it follows that the Church is charged with responsibility for religious education in state institutions of learning. The religious denominations, which are the forms that the social forces of the Church practically assume, are solely responsible for the religious welfare of these institutions. If the religious status of the University of Kansas is not satisfactory to the churches of Kansas, they have no one to blame but themselves. They have a definite function, which by reason of inability or inattention they have not discharged. If the churches are to meet God in judgment, and answer for the way they have done the work given them to do, they must recognize these state schools as fields for their labor.

Are the churches so foolish as to allow these young people to escape them? Do they imagine that they can afford the loss? Why, this is the best material the country affords! I can testify to the Christian fidelity of the University people, and assert without hesitation, that with the same amount of attention and wise application as we give to the people outside of the university, the former will outweigh the latter in every element of Christian value.

It must, of course, be recognized that there can be no sharp line drawn between the religious and secular in education, any more than elsewhere. All of religion has secular bearings, and everything secular

has a religious side. Nevertheless, there is a real distinction which we all must recognize between religious and secular education. Religious work must include:

I. The presentation to the student's mind of specifically religious and Christian truth. It should not dogmatically demand that certain propositions be accepted without question. To attempt the dogmatic in a state university is to fail at the outset and irretrievably.

II. It should include the religious interpretation of all the truth which comes to the minds of young people in the progress of their university study. At this point young people are overtaken by disaster. They come up from the farm and village home with a fund of theological conceptions, which they identify with the realities of the faith. Plunging into scientific, historical, and critical studies, they soon find a lack of congruity between their theological preconceptions and the new learning. Being perhaps unable to resolve the difficulties and having nobody to do it for them, they feel bound to choose between the two. They cannot part with the new knowledge, so they abandon the old faith. It is our place to show them the mistake of this, and to teach them how to harmonize secular and religious truth, and so hold faith in the bonds of knowledge.

III. Our work must include the organization of religious activities for the development of the religious powers. This involves the calling into this work of men specially fitted for the task. These must be men of the university type, i. e., men of broad, intellectual outlook, and sympathies with state university ideals. It is not worth while to put into this work men who rail at Evolution, and rejoice in their ignorance of Higher Criticism. Wholly aside from the merits of these views, university people believe that they have merit and will have naught to do with the man who does not approach them with an intelligent and sympathetic spirit.

The fit man for this unique work will have a personality full of virility as well as of Christian sweetness. He will be an embodiment and illustration of the large and noble ideals for which his work stands. Such a worker in order to be effective, must have university standing, without being a member of the faculty. He must have the standing to give him access to the student body, without being officially connected with the university, for the work must never feel the palsying hand of officialism. The very secret of its effectiveness is its spontaneity. And while it should choose a position where its fruits can be garnered, and from which its influences can permeate the whole university life, that position should be free from the official control of the university.

The work must have a relation to the local church as well; not for the sake of the Church, but for the sake of the work. The student should never be the instrument of the Church but the Church the

instrument of the student. The specifically university work should have just the relation to the local Church which will make the work most effective, and no more.

Of course, the details of this work are still to be wrought out in the University of Kansas. We have few precedents to guide us, and no experience; but I have personally done enough and seen enough to be sure of my ground, as far as I have stated it. Of the ultimate outcome I have no fear. The work will succeed. The fruit will be a type of strong, robust, Christian men and women, standing four-square to every wind of heaven; able to solve their own problems and to meet their own difficulties; fit to ennoble the state, and to vitalize the Church.

THE COÖPERATION OF DENOMINATIONAL AND STATE SCHOOLS OF HIGHER EDUCATION¹

WEBSTER MERRIFIELD, M.A.

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Fourteen years ago in my annual report to the board of trustees of the state university, I urged the importance of adopting some system of educational coöperation between the state university and the several denominations of the state before these denominations should become hopelessly committed to the policy of separate denominational colleges. The Congregationalists had already established a college at Fargo, and the Methodists were agitating the question of establishing a college and shortly after did so at Wahpeton in my state. My trustees took no action in the matter at the time but, during the years following, I discussed the matter freely with representative men of the several denominations in our state as opportunity occurred. Five years ago last March, in an address before the Methodist conference in my state, I canvassed the question quite fully and extended to the Methodists of the state a formal and cordial invitation on behalf of the state university to remove their institution to a location in the immediate neighborhood of the state university and to make use of the facilities afforded by the university to whatever extent they might deem it to their advantage to do so. Many prominent members of the conference expressed themselves at the time, as did President Robertson of the Methodist College, as in a general way favorable to the proposition, but stated that they considered themselves under moral obligation to the citizens of Wahpeton and other benefactors of their college not to agitate the question at that time. Last winter the trustees of the Methodist College at Wahpeton, whose style and title was the Red River Valley University, began to consider the feasibility

¹In the preparation of this paper I have availed myself of many valuable data gathered by Dr. James E. Boyle of our Department of Economics during the recent agitation of the question in our State.

of removing the college to another location. I again renewed my invitation to remove the college to the immediate neighborhood of the state university and to make use of the facilities afforded by the university for the carrying on of their educational work. Dr. E. P. Robertson, president of the Red River Valley University, visited me on the ninth of January last for the purpose of discussing a possible plan of coöperation between the Methodist college and the state university in case the Methodist church should decide to take advantage of the invitation extended through me by the state university. We finally arrived at a possible basis of coöperation which, upon the suggestion of Dr. Robertson, was committed to writing in the form of a memorandum as follows, this memorandum bearing the date of January 9, 1905: "Memorandum: Of a conversation held between President Merrifield, of the University of North Dakota, and President Robertson of the Red River Valley University, with reference to a tentative plan of coöperation between the State University and the educational institution of the Methodist church in North Dakota.

Whereas, The State University is in theory the university of all the people of the state, and is supported by the taxes of the members of the several denominations as well as of the other citizens of the state, it would seem to be appropriate and fitting that the churches of the several denominations in the state should avail themselves of the privileges which belong to their members as citizens of the state and should use, to whatever extent may seem desirable in the conduct of their educational work, the facilities afforded by the State University.

It is recognized that the State University is a civic institution and has for its mission the training of the youth of the state for efficient service as citizens. It is recognized, also, that the distinctive object of the church in maintaining schools of its own is to insure trained leadership in religious and denominational work. There is, therefore, logically, no conflict between their respective missions, for the same young people are to serve in both these capacities. These two missions being in no sense antagonistic, but supplementary, it would seem a part of wise economy that these two educational agencies should avail themselves, so far as possible, of the facilities and appliances of each other in working out of their respective missions, keeping always in view the principle of the separation of church and state in so far as regards the control and expenditure of the financial resources of each.

Accepting the foregoing principles as fundamentally sound, the University of North Dakota cordially invites the people of the various denominations of the state to the consideration of a plan under which the members of the several denominations, while preserving their denominational identity and maintaining separate institutions for such educational work as they may deem necessary, shall join as citi-

zens in patronage of the State University as the common agency of the state.

As a basis of coöperation between the State University and the Methodist church of the state, the following suggestions seem practicable:

1. That the Methodist church change the name of its institution from Red River Valley University to Wesley College.

2. That a building or buildings be erected in near proximity to the State University but on a separate campus, to include a Guild Hall, such recitation rooms as may be required for the work proposed, possibly dormitories for young women and young men, and a president's house.

3. That the course of study may be: (a) Bible and Church history, English Bible, New Testament Greek, Hebrew, Theism, and such other subjects as the college may elect in pursuance of its purposes. (b) A brief course that may be designated as a Bible Normal course, intended especially to fit students to become efficient Sunday school teachers and lay workers, and upon the completion of which certificates of recognition may be granted. (c) Instruction in music and elocution may be given if desired and appropriate certificates granted. (d) Guild Hall lectures.

4. That the State University grant for work done in subjects under (a) above, such credit toward the B. A. degree as it gives to technical work done in its own professional schools and to work done in other colleges of reputable standing. Likewise, Wesley College shall give credit for work done in the State University in similar manner as preparation for any degree or certificate it may offer.

5. Each institution shall have full control of the discipline of students upon its own grounds.

6. It shall be deemed proper for students to take degrees from both institutions if they so desire.

Webster Merrifield,
Edward P. Robertson."

This memorandum was subsequently approved by the faculty of the State University with the following proviso, viz., "that the State University shall in all cases be the judge of the quality of work to be accepted by it toward the B. A. degree and recognizes the right of Wesley College to be the judge of the quality of work to be accepted for any degrees it may grant." On May 15th last the trustees of the State University passed the following resolution: "*Resolved*, That the Board of Trustees of the University of North Dakota extend to all educational agencies within the state a cordial invitation to avail themselves to whatever extent may seem desirable of the facilities and appliances afforded by the University for the working out of their several educational purposes." The memorandum just quoted,

together with the resolutions of the Faculty and Trustees, constitute the formal invitation of the State University. On May 16th, 1905, the Trustees of the Red River Valley University voted to remove the University from Wahpeton to a location adjoining the campus of the State University and to change the name of the Methodist school from Red River Valley University to Wesley College, it being understood that when Wesley College should be opened it should be substantially upon the basis indicated in the memorandum. It is believed that the action of the Board of Trustees of the Methodist school has back of it the substantial sympathy and support of the Methodist church of our state. Indeed, no longer ago than Saturday of this last week, the Methodist Conference, in session at Fargo, unanimously endorsed the action of the Board of Trustees of the Red River Valley University in removing the institution to the immediate neighborhood of the State University, with a view to affiliation with the same upon the lines laid down in the memorandum already quoted, and pledged to the new Wesley College the enthusiastic support of the conference. President Robertson and the Trustees of Wesley College are now engaged in raising a fund of \$50,000 which, with the previously existing resources of Wesley College, will constitute a fund closely approximating \$100,000. As soon as this fund is raised it is the plan of the Trustees to build, on a site adjoining the campus of the State University, a president's house, probably a dormitory each for the young men and young women students of the college, and a building which may be used for the two-fold purpose of a recitation hall and a guild hall. Meanwhile, most of the students in attendance last year at the Red River Valley University have registered as regular students in the State University. It is believed that the step taken by the Methodists will, in the not distant future, be followed by most, if not all, of the other denominations of the state. The best known representative of the Congregational church in the state has recently stated that, if the step taken by the Methodists proves successful, the Congregational college will, in his judgment, remove to the State University within ten years. The Baptists of the state have already placed themselves emphatically upon record as favoring the plan in the following report of their committee on education adopted in their annual state convention held at Fargo in June, 1901: "The question is sometimes asked, Ought the Baptists of this State to follow the example of the Congregationalists and Methodists and found a college of their own? Your committee would say, emphatically, that the time for that has certainly not come. Indeed, it is doubtful if it ever will come. The situation in these new western states is very different from what it was in the early days of the older states further east. There, the state itself made little or no provision for higher education; here, the state makes ample provision along both liberal and professional lines. There is

no such thing as Baptist mathematics, or Baptist physics, or Baptist political economy. To found another institution to teach these and similar subjects would be to throw away money in useless duplication. The State University belongs to the Baptists as much as it does to anybody, and Baptists ought to appreciate and patronize it. There are several Baptists in the faculty, and we are glad to say that the atmosphere of the University is sympathetically and unquestionably Christian. It may be that, at some time in the future, it will be wise to establish in connection with the University a Baptist College, not for the purpose of duplicating courses purely scholastic, but for the purpose of supplementing the ordinary college course with other studies, such as Church History, Hebrew, New Testament Greek, Biblical Criticism, Old and New Testament Exegesis, and Theology, which of course, hardly belong in the province of a State University. In this way our denomination might utilize the laboratories and libraries and skilled instruction provided by the State, and, at the same time, provide, at small expense, instruction along religious and denominational lines. In this way, too, halls and dormitories might be provided in which young men and women, while attending the University, could be kept under the influence of a distinctly religious atmosphere. The University would be very willing to make such an arrangement with our denomination and it seems to your committee that this is an idea which it is well to bear in mind and work toward."

Within the past week the Presbyterian Synod in my state has appointed a committee of six, with power to employ a clergyman who shall nominally be assistant to the pastor of the First Presbyterian Church of Grand Forks but whose duties shall practically be those of Pastor at the University, having under his especial care those students in the University who are communicants or adherents of the Presbyterian Church. It is believed that this action is preliminary to the eventual establishment of a Presbyterian Guild Hall, to be located in the immediate vicinity of the State University campus. This action was taken by the Synod with unanimity and, I am told, with the greatest enthusiasm, and places the Presbyterian Church of North Dakota directly in line with the Methodists in the matter of denominational and state coöperation in educational work. The other religious denominations of the state have given no formal expression of an intention to follow the lead of the Methodists and Presbyterians, but in conversation with representative men of these denominations I learn that their attitude is entirely favorable to a similar plan of coöperation with the State University and that, when their several churches shall be in a position to start schools of their own, these will undoubtedly be located in near proximity to the State University with a view to coöperation with that institution.

This, in brief, constitutes the history of the movement toward

coöperation between the church schools and the State University in my state. That this is but an incident in a widespread movement throughout the country is evidenced by the following examples of coöperation elsewhere: The oldest experiment in the way of coöperation is that at the State University of Ontario, known as the University of Toronto. In coöperation with the University there are five denominational colleges, viz., Methodist, Church of England, Presbyterian, Low Anglican and Catholic. Some of these institutions are affiliated and some federated, the difference being that federation is an act of parliament and affiliation the act of the University Senate. The federated college becomes an integral part of the University, while each affiliated college has a single representative on the University Senate but does not enter in any organic way into the composition of the University. Of all the coöperating colleges, Victoria College, the Methodist school, alone undertakes to give instruction in Arts as well as in Theology. The other coöperating schools maintain only a theological faculty. All the institutions, of course, spare themselves the burden of maintaining museums, laboratories and libraries. The Methodist school alone duplicates any portion of the instruction offered by the University. In proof of the success of the Toronto experiment I am privileged to quote from a recent letter from Principal J. P. Sheraton of Wyckliffe College, representing the Church of England, who writes as follows: "The plan followed here has worked very successfully. We secure for our students all the advantages of the University, the broadening of view and enlarging of sympathy which come from contact with some two thousand students in Arts, Medicine and Theology, belonging to a number of different colleges and connected with a number of churches. We are preserved from the narrowness of an isolated theological college, and our men come into contact with men of all churches and destined for various professions, amongst whom their life work must be carried on. We get all the advantages of stimulus, of fellowship, and of the whole atmosphere of the University, as well as the advantages which come to us from the equipment and facilities which a great University like that of Toronto is able to give."

I quote the following also from a letter recently received from the President of Victoria University, the Methodist school coöoperating with the University of Toronto: "We think our system gives us all the advantages to be derived from denominational colleges with comparative freedom from the narrowing influences of a small sectarian institution. It does not make the necessary educational work unduly burdensome to the church, while it furnishes the sons and daughters of the church with the best educational advantages that the country can afford. At the same time it surrounds the State University with

the moral and religious influences of the churches as represented by their colleges."

Last May, in response to an invitation from the University of Manitoba, I attended their graduation exercises and delivered an address. On that occasion eighty-four degrees were granted, all of them to young men and young women who were primarily students in affiliated colleges. Of these colleges, four were denominational, representing respectively the Church of England, Catholic, Methodist and Presbyterian churches. Thirty of the graduates were in medicine and a dozen or more were in law. Both the medical and the law schools, like the four denominational colleges mentioned, are independently maintained, but are affiliated with the University of Manitoba, which alone has the degree-conferring power. The University, supported by moderate appropriations from the local legislature, offers courses in the natural sciences and maintains scientific laboratories and museums, leaving all other instruction to the affiliated colleges. The University Council, which is the governing body of the University, is made up of faculty representatives from the University and the affiliated schools. The titular head of the University is a Vice Chancellor, the working head being an officer known as the Registrar, most of whose duties are of the character usually performed by the Registrar in American Universities. Each of the affiliated schools is charged with the exercise of discipline over its own students. The relationship existing at the University of Manitoba is in almost all respects strikingly similar to that existing at Oxford between the several colleges and the University.

On this side of the line the plan of coöperation is quite different from that prevailing on the Canadian side, owing to the different conception existing in the United States as to the propriety of an entire separation between church and state in matters of education. The plan of coöperation between church and state schools has been carried out more or less extensively and completely in six American commonwealths, viz., California, Kansas, Michigan, Missouri, Oregon and West Virginia. An example of coöperation is to be found on the largest scale at the University of California where the Congregational church has established a well endowed theological school known as the Pacific Theological Seminary. The "Christian" denomination has also established a theological school in coöperation with the University. The Baptists, the Methodist Episcopal Church South, and the Unitarians are all moving in this direction and have already raised for the purpose, sums ranging from \$30,000 to \$250,000 each. All these denominations contemplate the establishment of theological schools to be grouped about the State University and to work in friendly coöperation with it. The Presbyterians have a theological school located some ten miles from the University across the bay, but

it is their plan, as soon as they shall be able to dispose of their buildings there, to remove to the State University and coöperate with it in the same manner as the other denominations named. President Wheeler in a recent letter says: "The coöperation consists mainly in this, that all students in the seminaries make free use of the University's opportunities. They can be registered as students and take such courses in the University as their own professors recommend. It is usual, for instance, for these students to attend our classes in Semitic Philology, Philosophy, History, English Literature, etc."

At the University of Michigan the "Christian" church has, since 1893, maintained what are known as the Ann Arbor Bible Chairs for the purpose of providing instruction of University grade in the Bible. They have one building and a small but well trained faculty. More than 1,700 students have taken one or more of these Bible courses since the chairs were established. The Episcopal and Baptist churches both maintain guild halls at the University for the benefit of students of their respective communions. The Episcopal and Baptist churches have also for some time maintained guild halls for the oversight of students of their respective communions at the University of West Virginia and the Presbyterian church of that state is moving in the same direction. Did time permit I should be pleased to speak in detail of what the "Christian" church, the Northern and Southern Presbyterians and the Episcopalians have done and are doing at the University of Missouri; what the Baptists have done and plan to do at the University of Washington; what the Episcopalians, the Lutherans and Presbyterians are doing in Nebraska; what the Presbyterians have just done in Kansas, and what the Congregationalists are planning to do at the University of Wisconsin. I may note in passing that on January 11th, 1905, two days after the date of the memorandum between the President of the State University and the President of the Methodist school in North Dakota, the Northwestern Christian advocate of Chicago published the report of a committee of three, consisting of the presiding elder of the Champaign district, the pastor of Parks Chapel in this city, and Professor T. J. Burrill of the University of Illinois, addressed to the members of the Methodist church of Illinois and recommending, in terms almost identical in part with those of the North Dakota memorandum, the establishment of a denominational college to be known as Wesley College in connection with the State University of Illinois. Similarly, at the last session of the synod of Illinois, held in Springfield last October, a committee was appointed to consider the relations, or perhaps better, the duties, if any, that existed between the Presbyterian church of Illinois and the body of Presbyterian students at the University. This committee has already prepared a plan which contemplates the placing of a good man at the University to look after the interests of the

Presbyterian students. This is for the immediate future. Ultimately, however, it is hoped to found a theological seminary of a nature best fitted to supplement the University work. In October, 1901, the Congregational church of America at its triennial council held in Portland, Maine, passed the following resolution: "Resolved, That this council regards with favor the project of establishing foundations of a religious character in connection with our great state universities, whose purpose shall be to provide pastoral care, religious instruction and helpful Christian influence to the students there assembled, and we heartily commend this enterprise to those of generous spirit as in the highest degree worthy of their sympathy and their gifts." Numerous other instances might be cited of resolutions passed and tentative action taken by representative bodies of the different religious denominations looking to some form of coöperation between these denominations and our great and rapidly growing state universities, but sufficient instances have been cited to show that the movement is general throughout the country and that the great religious denominations of America are coming to recognize not only their duty to the great numbers of young people of their several communions enrolled as students at our state universities, but the expediency from every point of view of changing their old-time attitude, often one of neutrality, sometimes one of positive hostility toward the state university into one of friendly coöperation. Perhaps I cannot better give expression to the changed and changing attitude of the great religious denominations of the country toward our state universities than by quoting briefly from a pamphlet recently issued by President Robertson of Wesley College, North Dakota, apropos of the new policy adopted by the Methodist church in our state: "In the last analysis, those who found the state university and those who found church colleges are one and the same people. It is clear that all citizens united can give the state university richer endowment by common taxation than groups of citizens can give denominational colleges by private donation. It is also perfectly clear that by the complete separation of the state university from church colleges the larger relative importance given to religious instruction will be in the church colleges, and, consequently, from them may be expected the larger religious and denominational returns."

"Grant both propositions and what have we still but an irrational separation of two agencies founded by the same people for their sons and daughters, who are exhorted to attend the church school for religious advantages, and urged to attend the state university because of superior equipment. * * * "To relate these two activities in time and place is the dictate of reason and common interest. * * * Good citizens want their youth to be loyal to the church, and good church men are men of civic devotion. To be compelled to choose

between church and state loyalty in selecting a college home for the son or daughter has caused deep perplexity. The new idea solves the difficulty. Civic pride and religious devotion join in one call to the highest type of culture and for the service and honor of the state and church." This quotation from President Robertson may be accepted as representing the attitude of the more progressive element of the Christian Church in America to-day.

In the following respects it is believed that the movement which has been inaugurated in North Dakota touches high-water mark in the general movement toward state and denominational coöperation in educational work.

1. There will be no duplication of work in the two institutions.
2. A year's work, *quasi* theological in character, done by the students of Wesley College in their own institution may be credited toward the B. A. degree in the State University. This concession the State University can safely make, for it retains full right to judge of the quality of work done in the other institution, while denominational pride and interest alike will prompt the coöperating institution to make its work of a character to compare favorably with that done in the State University. The subjects for which credit may be given by the State University, while not perhaps the conventional academic subjects, have yet had long and honorable recognition in the curricula of some of the oldest and most honored colleges in the land. In these days of broad electives who shall say that the study of New Testament Greek, Church History, Bible History, Biblical literature and the Evidences of Christianity is not as truly educational and may not as truly contribute to liberal culture as many of the electives offered by our state universities in their B. A. or equivalent courses? It is now generally admitted by educational leaders that it is the method of study rather than the content studied that determines educational values.

3. The affiliated college, by retaining its degree-conferring power, retains thereby in large measure its independent identity and there is thus removed one of the strongest objections urged by denominational schools, already established, against affiliation. To what extent this independent degree-conferring power will be exercised by the affiliated school in practice is, of course, yet to be determined. In any event, as three-fourths of the work on which its degree, if granted, will be based will have to be done in the State University and the remaining one-fourth must be of a quality to be approved by the State University, there is little fear that the degree of the affiliated college, if granted at all, will be discredited or will represent a low standard of attainment on the part of its recipients.

The great ends to be gained by the coöperation of state and church schools are, of course, economy and a wise conservation of energy.

The gain in economy alone ought to be decisive. The members of this conference certainly do not need to be reminded that modern institutions of higher education are exceedingly costly enterprises. Four of our state universities received during the last school year incomes in excess of half a million each; nine an income in excess of a quarter of a million each; and twenty-four an income in excess of \$100,000 each. Fifteen of them possess plants representing an investment of more than a million dollars each. Were the different church schools in each commonwealth to group themselves about the State University their students would receive the same instruction as those of the State University without a penny of cost to the several denominations and with only an insignificant increase of cost to the state. The children of the church schools would be under exactly the same religious instruction and influence as at present, while receiving in addition the inspiration which comes from the vigorous intellectual life of the whole University. For students in a theological seminary such a connection is especially valuable, tending as it does to make them broad and tolerant and affording an intellectual stimulus which no detached theological seminary can offer. This influence, indeed, is reciprocal, the life of the University gaining, perhaps, in spiritual quickening and uplift quite as much as it contributes in the way of intellectual stimulus.

One of the weightiest arguments for coöperation is one, until recently, rarely urged, viz., the distinctly religious influence which the churches would in this way bring to bear upon the great body of young people, many of them from homes not conspicuously religious, who are receiving their training in our state universities. It seems to me that no such opportunity for effective home missionary work was ever before presented to our great religious denominations and the field is one which will be constantly and rapidly widening. The growth of our state universities is certainly one of the startling phenomena of our time. During the ten years from 1895 to 1905 the eight leading colleges of New England,—Amherst, Bowdoin, Brown, Dartmouth, Harvard, Williams, Wesleyan, and Yale, all founded as denominational colleges, increased their attendance twenty-eight per cent. The eight representative colleges of the north central states, Beloit, Carleton, Cornell, Hinsdale, Iowa College, Lawrence, Ripon and Knox,—all denominational colleges and all competitors, as the New England colleges were not, of strong state universities, decreased their attendance about one per cent. During the same period the eight representative state universities,—California, Illinois, Iowa, Kansas, Michigan, Minnesota, Nebraska, and Wisconsin, increased their attendance more than ninety-three per cent. The total attendance in the eight state universities named was eighty-six per cent. greater than that of the sixteen denominational colleges together, and

far more than twice as great if we omit the enrollment in the preparatory departments of the eight denominational colleges of the north central division of states. These statistics are cited with no invidious intent, but simply to show what a magnificent opportunity our great religious denominations have to impress themselves religiously upon the young men and young women who, in rapidly increasing numbers, are thronging the halls of our great state universities. In our older communities where the different denominations have large sums tied up in costly and elaborate plants, the difficulties of such a union as I have suggested are not to be underrated; but in all our newer western states where several of the great denominations have not yet started schools of their own and where no denomination has as yet spent any considerable sum in buildings and equipment, the question I have raised is at least worthy of the most careful consideration. Should the churches respond to the invitations for coöperation which have been extended by most, if not all, of our state universities, they will find there no uncongenial atmosphere. No more vigorous Christian Associations of young people are to be found anywhere than at our state universities. As a communicant of one of our great religious denominations and at the same time as one who has seen much of student life at many of our great western state universities, I repudiate with President Northrop the imputation "that our state institutions of higher learning are not religious in the best sense of the word, and that their graduates do not go out into life with as genuine a respect for Christianity and as good a conception of what Christianity is as the students of any institution in the land." I have at hand no data, if such exists, to show what proportion of the professors and instructors in our state universities are communicants of Christian churches, but I know that in my own institution, out of thirty-five members of our general faculty (not including our professional schools) all but one are communicants of a Christian church. A recent census at the University of North Dakota showed all but twelve and one-half per cent. of the students reached to be professing Christians and church members. A religious census of our state universities taken by Professor Kelsey of the University of Michigan some years ago showed fifty-seven and one-half per cent. of the students in the leading state universities of the country to be communicants of Christian churches. Of course, a very large proportion of the remaining forty-two and one-half per cent. were church adherents and regular church attendants. It is stated, on what should be good authority, that in each of our great western state universities with possibly two exceptions, each religious denomination in the state is represented by a larger number of communicants among the student body than are to be found in its own church college in the same state. If this is true, it would seem to afford sufficient reason why the denominations should begin to do

something, in a systematic way, toward looking after the spiritual welfare of that important part of their membership which is to be found in the State Universities.

No one, of course, may undertake to say what is the comparative value in God's sight of two human souls. But in view of the parable of the talents one may be permitted to entertain the belief that the very flower of our American youth, who are to be found in our State Universities to-day, are, individual for individual, in the sight of God, worthy of as much attention from our great religious denominations as are the naked savages who roam the jungles of Africa and the barbaric or semi-civilized hordes who swarm on the plains of China or the banks of the Ganges. This conference affords gratifying evidence that, in the matter of our State Universities our churches are awakening to a sense of their higher duty and splendid opportunity.

DISCUSSION

W. J. LAHAMON, A.M.

Dean of the Bible College of Missouri, Columbia, Missouri

I wish simply to make a statement of the movement in adjustment to the University of Missouri.

The work was begun, as I remember, about nine years ago in a series of lectures by Dr. W. T. Moore, recently returned from London. Four years ago, I was called to assist him in the work, and later I was placed at the head of it. During these nine years we have succeeded in endowing the institution to the amount of fifty thousand dollars, and we now have property that represents thirty-five to forty thousand dollars. Last March we completed the erection of a most beautiful and commodious building on a lot directly east of the university campus and immediately across the street from the academic building of the university. A speaker preceding me referred to buildings of this sort that should not only accommodate the Bible College movement, but should be used also as dormitories. This is our plan precisely. By adjusting our work to the University of Missouri in such a way that we can send our young men into the university for all of their academic work, we are enabled to confine our biblical and our ministerial work in a comparatively small space. We can put this work on the first floor of our building for years to come. We devote the second and third stories of the building to dormitories. We have thirty rooms in the building for occupancy by students, and these rooms are all filled at present. The building, therefore, is netting us a rather handsome income. The gross income from it will be not far from twenty-five hundred dollars a year.

In addition to this, we are furnishing a commodious, and moral and ethical home, a home surrounded with Christian and ethical influences, for a large body of young men.

I have already indicated to you that we are incorporated as a college. It is our aim to put the work in this college on a par with the work in the colleges of the University of Missouri, so that ultimately we hope we shall be able to receive credits in the University of Missouri for work done in the Bible College of Missouri, while we ourselves are already giving credits to young men who come to us from the University of Missouri.

The young men who enter our college to make preparation for the ministry take, as I have said, all their academic and scientific and philosophical work in the University of Missouri. It is simply a matter of adjustment.

I have been asked since I came into your community what relationship we bear to the University of Missouri, and I always answer, "officially none." We feel that there should be no official connection between the denominational school and the state school. Our institution is wholly our own; it is managed by our own teachers and trustees, and is simply in adjustment to the university. There is simply the relationship of hospitality between these two institutions, and I may say that as far as I know all the members of the faculty of the University of Missouri have been wholly courteous and hospitable to the movement.

I would like to speak on some of the propositions that were made on the floor to-day. It was suggested, for instance, that the religious need of state universities might be met by university pastors, and it was still further suggested that the religious needs might be met also by the religious character of the instructors in the state universities. I feel justified in suggesting to you this evening that while all of this is good as far as it goes, there is a large field of biblical work that cannot be done by university professors from their chairs and that cannot be done by university pastors. The Bible demands specialists for its presentation, and university pastors as such can scarcely be expected to engage in this work, and however Christlike the instructors in our state universities may be they cannot do it for obvious reasons.

We believe it is competent for us to build our church schools, colleges, theological seminaries, whatever they may be called, in proximity, as has been said, to the state universities, and to do a work that shall compare favorably with the work that is being done in the universities, and successfully to commend biblical and ministerial work to the young men and women who are thronging our state university centers in increasing numbers. There must be, in such centers, the presentation of biblical truth in academic ways, and there arises, therefore, the necessity for such institutions as this.

It has been suggested that one great theological institution or biblical institution would meet the needs better than a number of small ones. I should heartily concur in that opinion if it were not an

impossibility for the present. If it were possible for us all to unite as biblical students and teachers, without reference to denominational predilections in great institutions, that would be very much better, but it is a far-off event. We must necessarily limit ourselves to present possibilities.

We are reaching between two and three hundred students in the University of Missouri and in other institutions in Columbia. I have a class numbering from forty to fifty in the Normal Academy in Columbia, managed and owned by Professor George H. Beasley, who is a Methodist. I go to this class once a week with a lecture on the life of Jesus and on New Testament history. I have a class of thirty young women who are taking lecture work in Christian College. We have over a hundred students of the University of Missouri signed up with us for work in such lines as Old and New Testament History, the literature of the Bible, the legislation of the Hebrews, and similar courses. My colleague, Prof. Charles Manford Sharpe, has charge of the work in the Old Testament, and is conducting a number of successful classes. I have a friend in Columbia who was an ardent admirer of Thomas Jefferson, and I have been assured by him that in the United States at least, the idea of adjusting biblical work to our state universities originated with that great man. The plan is familiar to those of us who have been on the other side of the line, in Canada. I understand it is the rule in Australia, and I join with many of you here this evening in the hope that it shall be so in America at no distant date.

REVEREND WILLIAM S. MARQUIS, D.D.
Moderator of the Illinois Synod of the Presbyterian Church, Rock Island, Illinois

It is significant that in a week of festivities and exercises such as you have enjoyed in the inauguration of the president of the state university, one day should be given to this subject. And these reports which we hear from every direction, of a common movement upon this subject, indicates that it is a real problem,—a somewhat acute problem,—and reveals the American manner of solving it. I rejoice sincerely that it also reveals the spirit of unity and freedom among Christian brethren, that they can meet and discuss this problem.

A committee was appointed one year ago by the Synod of Illinois to investigate this subject; to inquire what we, as a denomination in this commonwealth, could do for the students from our own homes in the state university. We recognized the fact that there was a large Christian influence here; we recognized the faithful work of our churches in these two cities and of their pastors; we recognized, and

have been helping to support, the Young Men's Christian Association which has been doing such magnificent work in this direction,—a work in which we are all interested and united. But we felt that there was something more needed; and so this committee was appointed to seek for the solution. It brought in its report to-day, and as the result of that report, this resolution was adopted:

"That the Synod take steps to employ immediately a suitable man for religious work among the students of the University of Illinois, whose duties shall be to give a course in biblical instruction to such students as will take it, and, as a student pastor, to bring to bear all possible personal influence for a Christian life upon the individual student.

"Second, that arrangements be made to establish at or convenient to the university a weekly or bi-weekly preaching service, and to secure for it the ablest preachers possible from the Presbyterian pulpit, especially of Illinois, pending the securing of the student pastor.

"Third, we recommend also that your committee on Christian education be instructed to take steps to secure a fund sufficient for the support of the student pastor, and to take charge of this whole matter together with such sub-committee as it may deem necessary."

As you will observe, this is but a beginning. It is in the direction of some experiments of which you have heard, and perhaps will hear more to-night. It is not so ambitious a step as that of which we have just been hearing from in Dakota and in Missouri. It is the same step which I understand was taken yesterday by the Baptist Association of Illinois, and we trust it will be productive of great good. I may say that the idea of the "Affiliated Christian College," which has been presented here to-night is the idea which I have longed to see adopted. I speak now as an individual, not as the representative of the Synod. I can but hope that these beginnings,—such as the resolutions of our Synod and of the Baptist Association contemplate,—may grow into this higher ideal,—the "Affiliated Christian College." It has been spoken of as "chimerical;" but let us keep on thinking and talking about it until it has been realized. Let us set it before our minds as the thing to be achieved,—a Christian college representing all branches of the Christian Church; in which each denomination shall have its individual professor, or professors, to do its distinctive work, but wherein the points we hold in common will be taught in common. Thus united Christianity will stand beside the state university emphasizing in a material way and in an educational way the real unity of the Christian Church.

It has been said that "visions are essential to tasks." We know it is so. No man ever climbed to the glittering peak of a mountain unless a vision of himself as the conqueror of nature led him on. No man ever attains to the heights of learning without a similar vision.

And this vision of a great united Christian College standing beside the state university and affiliated with it, is a vision worthy to be cherished that it may be attained. It is the vision of the motto written on the walls of this church. The vision set before us in the chapter read,—a vision of Christ the ideal man, whose character is the goal of all true education.

"There is no such thing," says a great educator, "as physical education, or intellectual education or spiritual education." it is only when you combine all of these that you have true education. That is what we all desire; it is what we are all seeking in the plans discussed in this conference. The Synod of the Presbyterian Church in Illinois is grateful for an opportunity to have a voice in your deliberations and to lay before you the action which has been taken to-day.

DAVID ROSS BOYD, Ph.D.

President, the University of Oklahoma, Norman, Oklahoma

I represent a small state university, say of six hundred to a thousand students. The attempt was made at the University of Oklahoma the year of its organization, by the Methodists, to establish a Hall, but it failed because of the necessity that the Methodist church was under at that time of using all the money that it had at its command in establishing its churches and in taking care of the people that were settling in the new country. Since then the development of the Territory of Oklahoma has been so rapid in population that this condition has continued. There have been some attempts at founding educational institutions, but none as yet have been established so as to have a real footing. We are therefore in the condition of having almost all the education of higher grade administered by state institutions. We have the state university, the agricultural and mechanical college and three normal schools, with an aggregate attendance of about thirty-five hundred students. The number of students in the communion of any one denomination or preferring any one denomination is so small that it would not be practical for a separate student pastor to be provided, as has been planned for larger institutions. But the local pastors in a small town such as ours, and as I remember the new universities in territories and in a number of the western states are in towns not larger than from three to six thousand people, are able in a great degree to take care of the spiritual necessities of the students. In our institution the student, on entering the university, fills out an application card and answers a number of questions, among which is, "What is your church preference? Are you a member?"—and each pastor is invited to take all these names, especially those who express a preference for his church, and also the names of those who express no preference, and to receive them into the church. And then, after

the day of enrollment, we have mailing cards so that the registrar may send the name of the student to the pastor of the church for which the student has expressed a preference.

I think what would help more than anything else now would be to get statistics of the conditions as they exist at the present time similar to those collected by Dr. Kelsey some years ago, for the purpose of circulation in all denominations, and especially in the state universities. The need I think is to proceed intelligently, observing the axiomatic principle, that no education, no teaching that is effectual can be done by authority, that no instruction can be imposed upon any one, that that instruction which is most effective is that which is received gladly and voluntarily, and that religious instruction must have this characteristic in precisely the same way as instruction in the science and in the arts.

I should like to note one thing. I think Professor Bryan alluded to-day to the fact, which I think is a significant one, that very few candidates for the ministry come from the state universities. He spoke very truly when he pointed out that this was on account of a lack of a strong personality bringing itself to bear upon the individuals that would be eligible to the call of the ministry and to impress upon them properly the importance of this calling, by setting it before them in a proper way. However, I can say for myself, and I think I voice the feeling of those who are interested in the state universities when I say it, we admit this, and it is deeply to be regretted, but at the same time, I wish to remind you that the efficient, influential, hard working layman in a church is of equal importance with the minister himself, the efficient, influential laymen are coming from this large enrollment of young men and young women that are going out from the universities. It is therefore just as important that we look out for these young men and young women in the state universities for the sake of their value to the church after they leave the university, as it is to look out that the needs of the churches are supplied with candidates for the ministry.

Another point I wish to mention, and that is the point that was made by a preceding speaker, in which he points out the conditions that you get in a number of small biblical schools representing each denomination rather than one large, comprehensive theological seminary. I suggest that possibly each denomination should have one person to teach the distinctive things of his education, and then some one that would teach all those things that are held by us in common. Now, for myself, I have attended divine service in a number of churches, but for many years I do not recall a single sermon that appeared to me could not have been delivered with the same propriety in any of the churches. And it occurs to me that if all these denominations were grouped around the state universities, their inter-rela-

tions and their mutual discoveries may lead to a unity such as will be helpful to all of us in a grand unity to which we are now looking forward.

Again, my friends, the university itself is a great organization. Surrounded with such spiritual influences as these, it will find its greatest inspiration and help. It occurs to me that if here and there an instructor were so indiscreet, not to say evil, as to make sarcastic remarks about the sanitary conditions or about the ventilation of the ark, with a university surrounded by such influences he certainly would be wise enough not to do it even if he felt the impulse to do it. So the university itself would feel the stimulus and the potent influence of this thing which I think it lacks at the present time.

REVEREND FRANCIS A. WILBER, D.D.
Principal of Westminster House, University of Kansas, Lawrence, Kans.

The question has confronted us in Kansas, in the theoretic stage, as our experimentation has been recent and brief, and precedents are few; but it is theory shaped in the light of experience elsewhere, and emphasizing methods of detail. For instance, the very question which Professor Gray put to me this afternoon, suggested itself at the outset, viz: "What name shall I give to the work, and what title to my office?" Respecting one's attitude toward the student body, the term "Student Pastor" seemed, all thing considered, to be the most suggestive and self-explanatory. To localize the idea, the academic term "House" easily suggested itself, and because the enterprise is promoted and supported by Presbyterians, we decided to call the student pastor "Principal of Westminster House." So much for the evolution of the name; the next thing to be considered is the status of the office itself, which implies a threefold relationship, viz., to the church, to the university, and to the student body.

With respect to the church, of course one's attitude toward his denomination, if he happens to represent one, is of vital importance. Let me illustrate this by reference to the various forms of initiative in the Presbyterian church, with which I am most familiar. In Michigan and Illinois, for example, the Synod has taken the initiative, by assuming responsibility and control from the outset, providing for the expense of administration either by a direct charge upon the church at large throughout the state, as in Michigan, or by accepting the generous offer of a private individual to assume the expense of experiment, as in Illinois. In Kansas the Synod took preliminary steps, by appointing a committee of advisement; the experiment was actually launched by the pastor of the Lawrence church, Rev. Dr. Willis G. Bunker, and a number of generous Presbyterians, who undertook to experiment upon the general plan, pending the discussion of policy

in the Synod. Thus you see the Synod is not financially responsible for the enterprise, in its present stage, as it did not initiate it. I ought to say, however, in passing, that the Synod has given it a most hearty endorsement, which is all the more significant, as it is deeply interested in the success of its own Synodical College. Its sole responsibility is expressed in a strongly worded resolution of endorsement, and the appointment of a committee, at our request, to inspect the work done, and report annually to the Synod. It is intended eventually to incorporate that committee as a board of trustees. Thus you see that the relation of the Synod to the project is purely sympathetic and advisory.

As to the relation of the student pastor to the local church, our experiment in Kansas is perhaps unique. He is not, as I understand is the case in Michigan, the assistant of the local pastor. Dr. Banker and I work together very cordially. It is understood that I am to use his pulpit in ways not prejudicial to his own work, coöperating with him in making a church home for the students, and affording to me an opportunity to address them upon topics specially connected with our Bible work or practical Christian life. I am in no sense a pastor of the church, but only a member of the congregation. Here, too, the relation is purely sympathetic and advisory. In connection with the Church Bible School I conduct a Bible class, composed wholly of University students; and these join freely and helpfully in the work of the Y. P. S. C. E. We cultivate this relation of students with the local church chiefly for social fellowship, to compensate, as far as possible, for the sundering of religious ties with the home church.

I wish to speak, thirdly, of the relation of the student pastorate to the university itself. Here, again, the relation is pure sympathetic. My standing with the faculty of the University of Kansas is one of mere social courtesy. Of cordiality I have had abundant and emphatic proofs; but the University assumes no responsibility whatever for our work, beyond an official resolution, strongly worded and passed unanimously by the board of regents, in which the value of this kind of academic work was appreciatively recognized. I cannot see how the position of the student pastor could have been strengthened by his election to the rank of a college professor, as has been done elsewhere. Indeed I have been led by a study of the problem to the conviction that the very weakness of the college pastorate, as such, which seems to be generally conceded by the graduates of prominent Eastern institutions, lies principally in the fact that the pastor was a member of the faculty. A friend of mine, who is himself a city pastor under the shadow of one of our largest universities, told me that the college pastor is looked upon by the students as a faculty spy. I have been assured by Chancellor Strong, of Kansas State University, himself a Yale man, that the failures to which I have referred would

probably be avoided in Kansas, from the very fact that the pastorate proposed to have no official connection with the University. This, I think, is the true theory of the case. If the work done is efficient and acceptable, the position will get proper recognition; if the plan should prove impracticable, the faculty would have no responsibility for the experiment.

The regents of the Kansas State University have promised that when the work shall have approved itself, and established a given academic standard, it shall be recognized by assigning to it credits in an elective course, in the same way as is done with study equivalents in other departments. In other words, there shall be no prejudice created against scholarly study of the Bible because it entrenches upon the subject of religion.

It would seem that such a liberal course would help to attract students to our classes who might not otherwise join them. I know it is said that if young people wish to take Bible study, they will do so with or without the credit system. On the other hand, many come to college with small means, and with the fixed idea that all their time must be employed in working for a degree; and if they could get credit for the time employed in Bible study, they would elect it; not for the purpose of "cinch" or "bunco" that is to avoid thorough work, but to acquire scholarly and scientific methods for study of the Bible. As a matter of fact, our classes are drawn from the most earnest and intellectual groups of the student body.

A most important factor in this whole problem is the attitude taken by the student class toward this movement. The personal equation has much to do with its successful solution. Under the voluntary system proposed, you cannot attract them unless they like you. The relation is pre-eminently a confidential one, as the name "Pastor" itself implies. It must be a matter of offered help and willing response, upon a basis of thorough frankness and sympathy. In the University of Kansas we offer Bible courses, as they do elsewhere, notably in the University of Missouri; and I can say that the response has been quite flattering. Dr. Payne, of the Christian church, has for three years conducted a "Bible Chair," along lines which I have described, and with marked success; so that the experiment in our institution may be said to have passed its critical stage. The Christian church deserves the honor of being the pioneer in the founding of Bible Chairs in state universities.

The work which we propose to undertake will, however, be a larger one than the term "Bible Chair" would indicate. The "Student Pastorate" will include, in our use of it, a twofold function, the academic and the personal. Academically, we shall offer courses of study in the English Bible and its original languages; in Christian Missions, theism, and the Harmony of Science and Religion; with now

and then a Round Table, at which matters of concern to students shall have social discussion. In this way we shall attempt to put our work upon what I may call an academic foundation. I hardly see how one who comes into the University circle can command the interest of the students, unless he avowedly adopts the university spirit. Here lies his advantage over the local pastor, who stands necessarily more or less outside of the university, being "town," and not "gown." One should, if possible, reside in the student quarter, and mingle freely and constantly with the student body, to do his best work with and for the individual student.

In accordance with this theory, my home is called "Westminster House," where my wife and myself dispense a cordial hospitality to all students, not only for social intercourse, but, what also is far more important, for personal acquaintance and confidential friendship. If I conceive this problem correctly, it is in the personal touch that the real secret of helpfulness will lie. One must be able to come into close contact with young people in their thinking and their aspirations, in their strivings and their questionings, perhaps in their failings and their fallings, and if God will, in their struggles and triumphs. A young lady who took tea with us last Sabbath evening, said to my wife as she went away: "You don't know what a blessed thing it is for me to come into a home. I have been in a boarding-house ever since I came here, and I am home-sick." We have discovered that girls away at school want mothering; young men, too, want brothering. Young people need something that no college curriculum can give to them; they need a friend. Sometimes, in their heart experience they are at the parting of the ways, and they need someone to come to them, not in an official way, or with a wisdom, but with an outstretched hand and a sympathetic heart. It seems to me that this personal work, the personal equation, as I have called it, is the most important factor, after all, in this complex problem. What we need, as was reiterated to-day, is life, the life more abundant. Books alone cannot impart it. It comes through contact with others. Life alone can impart life. We must furnish our young people with those suggestive lines of study which the secular curriculum of the university is unable to furnish, and to lead them, in the most critical period of their life, to a right decision in religion. The opportunity for usefulness thus afforded is most promising, I may say most alluring; enough to attract one from the ordinary work of the ministry into a work which has no statistics, and no growth that can be chronicled; a work which is like casting bread upon the waters, hoping it to come back after many days. It is a humble and unostentatious work, like all foundation-building; but if planned broadly, and built with the Divine materials ever at hand, it has in it the prophecy of a great superstructure for the honor of Christ and His church. Success must

crown our efforts, if we build after the Divine plan, "that our sons may be as plants, grown up in their youth; that our daughters may be as cornerstones, polished after the similitude of a palace."

MISCELLANEOUS DISCUSSION

REVEREND E. L. RIVARD, C.S.V., D.D., Ph.D.
Professor in St. Viateur's College, Bourbonnais, Illinois

Nothing is more significant in the field of intellectuality and morality than the appeal made on the part of this great center of enlightenment to the Church, and consequently we welcome this movement and feel encouraged in its ultimate hope of a wise solution of problems because of the friendly unanimity with which discussion has been entered into by the diverse religious bodies here represented.

Now, it seems to me that since the appeal is made by the university to the church, that the churches must act as churches. Every church or denomination is distinct from every other by reason of the distinct meaning it takes from the Bible, the way that it looks upon religious duty, its various positive religious tenets and practices. I take it upon myself to say to you that all the parents of the young Catholic students who are here in this university will applaud any movement that will more securely place their sons and daughters in the hands of the residing pastor, the popular Father Cannon, Pastor of St. Patrick's Church. And I do not doubt that the parents of other students will applaud likewise any movement that will insure the propagation of their religious convictions, so that when these young men and young women leave this great institution, they will not return home with an intellectual equipment only that will insure their practical success in life, but they will return with their religious convictions deepened and broadened proportionately with their intellectual education.

It seems to me, therefore, that the work of religious education, so far as it relates to the student body, is to be done by the local churches, and the pastors must adopt such means as will seem to them best to accomplish this end through a consideration of such subjects as the evidences of Christianity, the philosophy of religion, and the treatment of questions that are on a parallel with the mental development of the students who attend the university. It seems to me that if this method is followed out we shall reap the best results, and then we shall certainly have done our country and our State the best service that we are able to render in the present conditions.

UNIVERSITY OF ILLINOIS

INSTALLATION
OF
EDMUND JANES JAMES, PH. D., LL. D.
AS PRESIDENT OF THE UNIVERSITY

PART III.

PROCEEDINGS OF
THE CONFERENCE ON COMMERCIAL EDUCATION

OCTOBER 19-20, 1905

EDITED BY GEORGE M. FISK, PH. D.



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PREFATORY NOTE

For the purpose of discussing some of the important problems connected with the recent development of higher commercial education a conference was held at Ann Arbor, Michigan, in 1903 under the auspices of the Michigan Political Science Association. The success of this conference led to the suggestion on the part of those who participated in it, that other conferences be held from time to time for the purpose of discussing some of the new questions which were bound to come up in regard to different phases of commercial education.

It was thought well, therefore, to hold a second conference on the general subject, at the University of Illinois, in connection with the exercises of the installation of Dr. Edmund J. James as President of the University. The conference met and held four sessions, according to the program below.

PROGRAM

FIRST SESSION: 9:00 A.M., Thursday, October 19

Mr. Andrew McLeish, of Chicago, Presiding

Address of Welcome: Dean David Kinley.

GENERAL SUBJECT: The Aim and Scope of University Courses in Commerce.

Address: The Essentials of a Course in University Commercial Education: Professor John Cummings, University of Chicago.

Discussion:—

Professor William A. Scott, University of Wisconsin.

Professor Ernest R. Dewsnap, University of Chicago.

Mr. Andrew McLeish, Chicago.

Address: Character of Instruction; Should it be Technical? Professor Harlow S. Person, Dartmouth College; Professor Maurice H. Robinson, University of Illinois.

Discussion: Professor Matthew B. Hammond, University of Ohio.

SECOND SESSION: 8:00 P.M., Thursday, October 19

Professor William A. Scott, University of Wisconsin, Presiding

GENERAL SUBJECT: The Relation of High School Commercial Courses to University Courses.

Address: The Essentials of a High School Course in Commerce: Principal J. S. Sheppard, N. Y. High School of Commerce.

Address: Correlation of High School and University Courses: Principal James E. Armstrong, Englewood High School, Chicago.

Discussion:—

Principal F. D. Thompson, Galesburg High School.

Professor M. H. Robinson.

Superintendent E. G. Cooley, of Chicago.

Professor G. M. Fisk.

Superintendent T. C. Clendenen, of Cairo.

Professor D. E. Burchell, University of Wisconsin.

Professor M. B. Hammond, State University of Ohio.

Principal J. E. Armstrong, Englewood High School.

President G. W. Brown, of Brown's Business Colleges.

THIRD SESSION: 8:00 P.M., Thursday, October 19

Honorable William B. McKinley, M. C., Presiding

GENERAL SUBJECT: Business Practice.

Address: How Shall We Teach Business Practice? Professor D. E. Burchell, University of Wisconsin.

Discussion: Mr. G. W. Brown, President and Manager of Brown's Business Colleges.

Address: What Business Men Want Young Men to Know: Mr. David R. Forgan, First National Bank, Chicago.

Discussion:—

Mr. E. L. Scott, of Sears, Roebuck & Co., Chicago.

Hon. W. B. McKinley.

Address: Ethics of Business: Rt. Rev. E. W. Osborne, D.D., Bishop Co-adjutor, Springfield, Ill.

FOURTH SESSION: 9:00 A.M., Friday, October 20

Professor Edward D. Jones, University of Michigan, Presiding

Address: Commercial Museums: Professor W. R. Patterson, University of Iowa.

Discussion:—

Mr. W. H. Schoff, Secretary Philadelphia Commercial Museums.

Professor H. S. Person, Dartmouth College.

Address: Commercial Organization: Professor J. S. Hagerty, University of Ohio.

Discussion: Mr. C. C. Parsons, of the Shaw-Walker Co., Chicago.

Address: Training for Government Service: Dr. E. D. Durand, of the U. S. Bureau of Corporations.

Discussion:—

Dean David Kinley, University of Illinois.

Professor E. D. Jones, University of Michigan.

FIRST SESSION

ADDRESS OF WELCOME

By DEAN DAVID KINLEY

It is with much pleasure, alloyed with regret, that I have the privilege of welcoming you to this conference on Commercial Education. It is a pleasure, because it gives me an opportunity to greet you; it is a source of regret because our President, who, I think, was the first, and certainly is the most distinguished, exponent of the demand for university education for business life, is not himself able to greet you. I assure you, however, that your welcome is none the less hearty, and I bring his greetings and his expression of good will and interest in the work for which we are gathered.

It is a new thing in the educational world that we are gathered to discuss. For a long time, colleges and universities have thought that their field of work was to prepare young men and young women either for one of the older professions or for no specific calling. They have sought to lay an educational foundation for the study of law, theology, medicine and teaching. They have not, until lately, regarded preparation for the higher positions in business life as worthy of their attention; nor have educational authorities supposed that the subject matter of the studies that deal with business life were capable of classification and systematization sufficient to make them available in the college curriculum, or of sufficient logical intricacy to make them valuable as a means of mental training. We see now the error of our ways, in this respect. Many of us have recognized, and soon all of us in colleges and universities will recognize, the truth of the statement that the higher positions in business life may truly be regarded as professional, and really demand a training as rigorous and as broad as is called for in preparation for one of the learned professions. Hence it is that so many of our higher institutions of learning have been organizing courses in commerce, or courses of business training, or schools, or colleges, of commerce. The aim, I need not remind you, is to develop in young men mental and moral qualities that will fit them for positions as superintendents, managers, presidents or directors of corporations and other forms of business organizations.

Of course we do not make the mistake of supposing that our graduates are going into these high positions at once; our whole plea lies in the claim that young men, trained as we are trying now to train them, will rise more rapidly and attain a higher eminence and greater success in business life than they would be likely to attain without this training.

Moreover, conditions of success in business in these days are more intricate and difficult than ever before. In this country, we have availed ourselves of the most easily utilized of our industrial opportunities. Whatever success we attain now, in international competition, industrial and commercial, can be attained only by working with a skill and intelligence equal to those possessed by our keenest competitors. In other words, business life now demands, in all departments, men who are severely trained, mentally and morally.

It may seem difficult to determine which of the two kinds of training, mental or moral, conduces more to success in business life. The difficulty, however, is really, after all, a simple one. We are appalled to-day at the revelations of corruption, neglect of duty and small sense of responsibility displayed by some of the heads of our great corporations. I have in mind particularly the insurance investigations and certain recent bank defalcations. These experiences lead us to the conclusion that, no matter how abundant and excellent the facilities for mental training for business life, they will be of little use in the long run, either for the individuals who get the benefit of them or for the business development of our country, unless they rest upon a stable foundation of integrity of character. Business life needs a higher standard of ethics. Business morals need to be uplifted, purified; and one of the most important duties of the colleges and universities in these courses of training for business life, is to set high standards and new ideals of business morality before the young men who are soon to carry on the business of the country and of the world.

It is not true, as is sometimes said, that a man cannot be honest and successful in business at the same time. There are firms, whose business life extends through many years, whose reputation for integrity has always been unsullied. In the ranks of business men, there are many whose standards of moral conduct in business dealings are as high, whose hands are as clean, whose business lives are as pure, as those of any other man in any other calling. Such men are an inspiration to the young men who are looking forward to business life. It is, therefore, with peculiar pleasure that I am able to introduce to you, as chairman of your session this morning, one who is an example of the kind of man and whose business is an example of the kind of business, which I have just mentioned; one of the greatest merchants in the city of Chicago; one whose long life has been devoted to mercantile pursuits; one whose business and whose life, through all these years, have been a shining example of uprightness, high ideals and strict honor in all relations; and who, at the same time, possesses the keen intellectual qualities and the native talent for business that make great merchant princes. Such a merchant prince and, more than that, such a man, I have the pleasure of presenting to you to-day in

the person of Mr. Andrew MacLeish of the firm of Carson, Pirie, Scott & Co. of Chicago.

Mr. McLeish responded gracefully in acknowledgment of Dean Kinley's introduction, emphasized his agreement with the opinion that a high standard of business ethics is essential to the best success, and then called for the opening paper.

THE ESSENTIALS OF A COURSE IN UNIVERSITY COMMERCIAL EDUCATION

By PROFESSOR JOHN CUMMINGS, PH. D.
University of Chicago

The university commercial education means something different from the professional training which the college gives. We are brought to the question, how far can the university go in this direction without sacrificing something of its high ideals of scholarship? How far may university work be made technical? We watch the dissolution of the old courses with a good deal of trepidation and anxiety lest our ideals of scholarship should be impaired and lowered and narrowed, or lose in character.

Of course we are all familiar with the theory of education which is still the theory upon which many institutions organize their work, that exactly in proportion as university work has a utilitarian character, exactly in that proportion and to that extent does it lose character and educational value and encourage the tendencies which I have in mind when I say the liberal arts course has been broken up.

We have seen the four years' course brought down to three and there is a tendency to shorten it still more. One college president has said that he believes a two year course is desirable. The first year of professional schools like law and medicine is made the last year of the liberal arts course, thus shortening the time of the professional course. We find the schools insisting upon certain prerequisites which shall be taken in college before the student can enter these professional schools. That gives the liberal arts course this bearing, and leads to this organization of the work with reference to the professional schools. Classics are largely excluded from the liberal courses excepting for those who are fitting themselves to teach them. Finally we have seen the work of undergraduates organized under such general headings as schools of philosophy, of commerce and science, of arts and literature, of commerce and administration. The American college today is not a college so much as it is a group of colleges, each of a more or less professional or technical character. It is broken up. There is still a remnant left which is called the liberal arts course. Ordinarily this is a course for teachers. We might recognize the fact that Latin and

Greek are taught for the purpose of fitting people to teach them and not for the purpose of getting anything educational or cultural out of them. Not one student in a thousand makes his Latin or Greek a live interest unless he is a teacher of it. That course is professional just like commerce or administration. A man going into certain lines of business wants to know something about systems of transportation. If he is going to teach Greek or Latin he must know something about Greek and Latin. We may say that our university work at the present time is tainted with commercialism. I have been more or less associated with my colleagues in certain lines of work in Chicago, and I am convinced that the most questionable work which a university undertakes to do at the present time, the work by which it is more likely to lose character in university circles, is that which takes the university out into the world of affairs and makes it a factor there by dealing with men who are earning their living and who have only evenings to devote to the study of certain subjects in which they are interested. We have taken up this work with railroad employees, Chicago being a great center; it has also been taken up with men in banks, and in other lines of business, in commercial houses and in insurance. That sort of work will lose character for the university man because he is in such close touch with the commercial world and is rather removed from university work. I conceive that the problems which arise are exactly the same which confront any one in his regular university work, in dealing with men who come from the high schools in the ordinary course. These men who are working in some great corporation want to understand something of the part which this corporation plays in the world. Their needs are exactly the same as that of the student who is going into the industrial world. They both want a comprehensive understanding of the complex industrial organization in which they are placed or expect to be placed.

That is the great object of education in general. It is to make a man intelligent. But what is intelligence? It means that a man should understand the environment in which he lives. What makes the educated man distinct from the uneducated is the understanding of the environment in which he is working and living. If he can add an understanding of the environment in which the Egyptians, the Romans and the Greeks lived, that is an advantage too, but is not so essential.

All that I can say on commercial education relates to that simple principle. The well educated man is distinguished from the ignorant one by having a comprehension of the social life of which he is a part. Applying this to commercial education, this must require parallel knowledge of commercial and industrial development. The fundamental principle which the university should observe in these commercial courses and in determining what is essentially a commercial

course is thus laid down. I think it is true of the American universities that they have omitted the necessity of looking at the environment in which they live but have imitated what their associates are doing under different circumstances. Of course it is all imitation from the old Greek and Roman. American universities have gone on for one hundred years and taught Latin and Greek. The influence of the monks has come down to the present time. There is nothing in history that is so extraordinary as the persistence of that old scholastic ideal in a community which is just as different from that old community in its resources and character as could possibly be conceived. In determining the essentials of a commercial education let us take the simple principle that I suggested. If a university is exerting its influence throughout an agricultural region, what is the nature of the work for that college? It is eminently fitting, I should say, for such a university to devote itself largely to those great economic problems which pertain to agriculture. It is exceedingly unfortunate that our economics is written from the point of view of men who live in cities, rather than in the country. Two-thirds of our population is rural. Their economic problems have to do with that form of life and should be based on the fact that the community is agricultural. The problems and conditions are agricultural. It is too often true that economics deals mainly with the stock exchange in New York City, with foreign trade, high finance, and all that. It does not touch the real vital interest with which a great population happens to be mostly concerned. In a community devoted to manufacturing it would be quite natural to found its commercial education upon that fact. It should be largely historical of our great industries and the peculiar conditions and problems that arise in relation to labor and capital. In a commercial center, it should deal mainly with commerce. In Chicago we are the center of great railroad interests and we develop along that line. Where the general economic interest is agriculture, manufactures, finance, insurance, and so on, the course of instruction should take that form. The place of economic interest and economic development may lie within one or the other of these fields. The university should recognize this fact, and the work should be more or less directly related to the occupations of those who make up the community. If it be farming, the university should recognize that fact in its work.

The so-called liberal arts course is undergoing its final dissolution, that which is commonly known as liberal arts course being a course for teachers now. The A. B. classical course is for teachers and not one to give the cultural training which we associate with the study of Greek and Latin. The organization of colleges has been effected in order to bring the college and university work into relation with real life interests and to give these courses a utilitarian significance. That, I think, is in accordance with the sound principle of the philosophy of education.

The essential of a course in commercial education is that it shall strike its roots deep into the industrial character of a community over which the university happens to extend its influence. The majority who go through our universities are turned into these industrial pursuits and that fact should not and cannot be ignored by the organizers of our college courses. The college should offer work which will enable them to take up these affairs with a greater degree of intelligence.

Personally, I took up certain lines of work with certain preconceived ideas regarding it which I soon modified very materially. There is some uncertainty among the universities as to the attitude of the business world toward this effort on the part of universities to take up this line of work. We found in Chicago that the business world was willing to come more than half way; that was surprising, I think, to some of us. At least I may say that I did not anticipate it. Wherever we have approached the business community, there has been an evidence of the keenest sort of desire to get anything the university has to offer of value that will widen the horizon of those who are employed in industrial pursuits. That has been one of the most striking development of our work in Chicago,—to find the business world willing to take chances. They do not wait to have the thing demonstrated absolutely, but are willing to take chances that certain lines of work may prove beneficial. Not profitable in the sense that they would add to the income of certain corporations; but beneficial in another sense,—that it might prove helpful to those young men who were employees in this great corporation. We have found business men willing to make sacrifices in order to prove or disprove the ability of the university to be of service in the world of affairs. That is reassuring for those of us who are in university and college work. Every now and then we are told that the place to learn business is in business, banking in the bank, railroading in the railroad; but that does not quite express the feeling of the business world at the present time.

DISCUSSION

PROFESSOR W. A. SCOTT, PH.D.
University of Wisconsin

I am so heartily in accord with the general propositions which Professor Cummings has laid down that it will not be necessary for me to do more than give a few concrete illustrations of the general trend of events. Any person who has been actively engaged in this movement for commercial education, and has lived in the university atmosphere in which this development has taken place, will appreciate very fully the remarks in regard to the general trend of university courses. The breaking up of the so-called liberal course brings out

one or two facts to our notice. If you study the development in the institutions of learning in which it began you will find that a good many institutions have really simply copied other institutions, and have not felt within themselves the necessity and impulse to do this sort of thing. You will find this situation existed in a number of institutions. In the first place we changed in going from the old cut and dried specific college course to what is called the elective system. When students began to elect a revelation came which caused cold chills to run down the backs of our old fogies. They discovered that students in the university preparing for practical life selected subjects almost exclusively with reference to their future work supposing these subjects would be better for them after they got out in life. At the beginning the changes were slow. The electives were not such as to bring one very closely into life. History was valuable, and economics. Students selected them. It was necessary in the classical departments to develop teachers' courses because the general demand was for that sort of training which would help people in teaching. The more the elective system developed the more that fact became patent,—that the student's primary motive was to take those subjects which would be in preparation for the life he intended to enter.

In order to meet this situation there began a rapid process of development in the direction of practical life in such subjects as science, chemistry, physics, etc. Then the outside world demanded of the chemical departments of the university that they do certain practical things; that they analyze water and various other things. They were forced to do it by the necessities of the situation. They saw how extremely valuable these things were to the civilization of the present time. The same thing was true of physics, and even of mathematics, which was considered far removed from practical life. Economics is another. The study of economics began with a study of some very remote propositions in regard to wealth, value, exchange, etc. These topics were put down in the text books; but when men really began in earnest to discuss the subject of economics and investigate it they began to see its practical bearing, and developed special courses along these lines. The development of the science itself required this as well as the necessity of studying practical life. The men had to collect data and they set students at work in their seminary courses on it. They thus developed courses in money and banking, transportation, and commercial geography; all of these before commercial education entered into university life and simply as a necessary development.

So through other departments. The study of languages; the demand for teaching modern languages so that they would be of some practical use to people. The experience of a large number of people who went to Europe, after studying a little German or French, was that they could not speak the languages sufficiently to be understood.

This led to the demand for practical courses in the foreign languages before commercial education became established.

Accompanying this rapid development of courses of a practical character which you can trace in the proceedings of the educational associations all over the country, was a study of the nature and educational value of these new subjects. Every subject has been obliged to fight its way by showing that it was good for something; that it was educational in character. The universities said it might be good for particular public purposes, but not for the university. But gradually history, economics, science, fought its way, and convinced fair minded university people that the student could gain culture as well by a study of those subjects as by a study of Greek and Latin; some were inclined to say a broader culture. Now these three movements went on side by side—the demand by students for practical courses and the selection of them; the development of all branches of science and the humanities in the direction of practical life; and the demonstration of the practical educational value of these courses.

The movement from the outside also forced attention to commercial education. It came from the young people themselves. Those who studied the high school situation, the preparatory school people, saw that a considerable proportion of the graduating classes, and perhaps much of the best material, did not go to college but went directly into business. They did not think it necessary to go to college if they were going into business. It was felt that a certain type of young men ought to have a broader training than the preparatory school gave and it was a great mistake that many who were able to do so were not going to college. Why was it? A man says, "My son is going into business and why should he go to college? Of course it is a nice thing to have a college education, belong to a fraternity and wear a pin, attend university banquets, and so on; all this gives a little prestige and a sort of social power. But after all, so far as any real practical value is concerned, it did not amount to anything." The universities began to wonder if there was any truth in the statement and this was forced upon the attention of state universities first and they could not ignore it. They were supposed to be of use to the State and they were obliged to recognize the fact that a constantly increasing proportion of the best students were not going to college at all, but directly into business. Business men have been criticizing the universities for along time because they said they were not practical; because their students were "no good." When they got out of college they had to unlearn so much; and many students were unable to spell, to write good English, and so on, and these criticisms were freely made. Business men made themselves felt by their influence on boards of trustees, in the press, and in every possible way. It was this movement from within and this movement from without that

culminated in the establishment of commercial courses in our colleges and universities.

When we began to recognize the need of a training that would assist men to go into business, we discovered that we had already developed a large number of courses which were valuable for this very use. To correlate them and to put them together in such a way as to be effective was the next thing. The student made his own selections; some things he needed; some things he did not. We found gaps here and there which would need to be filled up; we discovered many things which had been taught from time immemorial which should still be taught, but in a different way. English was not being taught right; students could not write a decent letter; they could not make a mathematical calculation after going through a mathematical course. So the demand came for making the courses more efficient. A perfect transformation took place in the methods of teaching English. And the demand grows, to make efficient for practical purposes the courses given in our colleges and universities. The movement is really a logical development out of the whole situation. It is a demand to adapt university work to the needs of men in this twentieth century. The line of development has been different in different universities, but it has been substantially the same. Some have done one thing and some another, but the thing is here, we are meeting it, and it is certainly here to stay.

PROFESSOR E. R. DEWSNUP
University of Chicago

While listening to the very interesting paper and to the equally interesting discussion, some thoughts have occurred to me which I think it is well we should keep in mind.

Professor Cummings in his paper referred to the real nature of university training. He said that a university training is something different from a professional or technical education or an education such as can be obtained in a business college. While we all agree, I think, that the business colleges are doing a very valuable work, yet it is hardly an educational work. The stenographer and bookkeeper want to earn money and they want that certain training which enables them to get money in the shortest possible space of time. That is not education. The origin of the university course of education was practically professional. We talk about our course in liberal arts, but I want to know in the original university was there ever a liberal arts course? They studied Latin, but after the revival of learning they did not study Greek. Why did they study Latin? It was the language of the time; it was the language of communication between nations; there was a distinctly practical purpose to the

attention given to the study of Latin which to some extent is proved by the neglect of the language until the revival of learning. Moreover, when we consider the nature of the courses taken in the mediæval universities, we find that they were professional and the colleges out of which the universities sprang were essentially the same in character. It was the predominant idea of education. The training for theory was just as much professional as for law, or medicine or commerce. I think, then, we are justified in coming to the conclusion that the earliest idea of education was professional, and not general culture apart from the professional.

I would like to draw a distinction between technical and trade schools. We talk about technical education including the trade schools. The two should be distinguished. The question whether the trade school is a useful adjunct to the university has been discussed. I define the two in this way. The technical school gives that broad scientific knowledge and a general knowledge of the industries which each student should get. The trade school prepares specifically for the larger and original work of the man's later occupation. There has been a good deal of mistrust as to whether the university prepares the young man for the larger and original work of a business life. In some respects the university cannot. I have been associated both in Chicago and at Manchester with the courses in commercial education as conducted by these universities, and I have always tried to impress upon my students that the greatest asset they can have will be good sense and experience; that without them they can make no success. We can only give them the broad training and general education which they can convert into material results. We may try to make the student understand something of the general relationship of the practical world, but we are not expected to qualify him to go from school into business and industrial life and take up the work as though to the manor born.

I feel inclined to disagree with one point which Professor Scott makes and that is with regard to the development of the science of political economy as closely associated with the development of commercial education. I really think, as regards our own science, as promulgated by its earliest teachers and as understood by Adam Smith and taught by him to some extent, it was very largely practical in character. Questions of definition, theory, scope and method did not receive great prominence.

The point comes up in connection with the business world that the university courses have been rather unfairly treated. The university man has sometimes proved a failure in business; we might say very frequently so, and it has been charged to university education. As an instructor and an economist I wish to refute the charge and to say that the potent factor has not been so much the university education,

except in some special cases, but the failure of social training. All our earlier business men, and this is true of England in particular, sprung up from the custom offices. They made their positions. After they had accumulated a certain amount of wealth, their children were brought up in different circumstances. They were largely left to the care of servants. The result of that action can only be detrimental. I think that this state of affairs very largely accounts for the failure of our young men of the present day who are placed in positions of responsibility. It is due to the failure of social training, arising from the causes pointed out, and not to the university training which, in all but comparatively few instances, exerts an elevating influence on the individual. This is a point the business world should take into consideration in connection with commercial education.

Now what shall we aim at in arranging our courses in commercial education? In my work in England I was very much discouraged at times to find that the business and commercial men of the country favored, or at least a certain portion of them did, preparation for commercial business, but on a very restricted scale. We want a man to have a knowledge of corporations, a sufficient knowledge of commercial law to enable him to keep out of the hands of lawyers, some knowledge of general economics and modern languages. We do not want him to know anything about the fine arts or mechanics. He should know something of mathematics and enough of statistics to be able to use them. Some knowledge of commercial geography was also desired. This was a disappointing curriculum, but at the same time, if we were to get business leaders interested in our university education, we would have to offer something approximate to what they desired. One university, the University of London, I think, departed completely from this idea, and in their syllabus they offered a curriculum intended to give that broad training in economic analysis, that originality of opinion and independence of reasoning, that is far more valuable to business men in their varied associations than many subjects offered in the universities. At Victoria University one may now get a bachelor of commerce degree, by taking a course that resembles to some extent the London course, a course which gives that broad mental grasp of things which is necessary for entering into business life. But if you wish you may substitute. A man may take up the study of active industries, railway transportation, banking, so that he gets a comparatively small amount of general economic training in his whole work.

Now there is some doubt in my mind whether we should attempt to give a man equipment in a number of different subjects. Should he know a little economics, a little law, a little mathematics, and a little of this or that? What is the mental value of such work? Does not the spreading of his college course over so many subjects tend to

curtail the educational values of these subjects? Mathematics has an educational value, the classics have another, sociology and economics have another. But has the study of a small portion of each of these subjects the educational value that is generally attributed to the subject? Judging from the results of the young men that have come out of English institutions I am inclined to think that they have not. In arranging our educational courses we need more specialization on broader lines. I believe that a man should know the general foundations of economic analysis, have an acquaintance with economic facts, and that he should be encouraged to specialization after getting that broad foundation which must include a certain training in other lines during his first two first years, training to some extent in history, mathematics, etc. Instead of saying we are training a man in railroad transportation by giving him a couple of quarters' work in that subject, we should devote far more of his time to it. We should not think we are preparing a man for any specific field, whether railroading, journalism, or banking, or what not, when we give him only a smattering of the subject. If that is going to be the case, I would far rather concentrate the man's study on general economics, or general mathematics. If we are going to prepare a man for going into transportation or banking, we should delve deeply into these subjects and get into touch with the actual affairs of life. It should be the idea that a man is to acquire knowledge which will enable him to go into these businesses and get on better and faster than his untrained fellow, and that he can do this is a proof of the value of the university training. If he does not attain that end, it is a proof that the university courses are not desirable.

By a proper arrangement I believe that we can have this detailed study of particular branches. And here I would bring in another thought. I would like to see some of the day courses transferred to the evenings. Not duplicated, but actually transferred. I do not see why young men or women should not be prepared to attend one or two courses in the evening as well as in the day time. The reason is that we can associate with our students, men in business who also want to study along these lines. Do you not think that this combination would produce better final results? I think so. I know on a small scale the results have been very satisfactory. I do not say that we should admit Tom, Dick, and Harry into such classes. There are large numbers of young men in the commercial world who should enter, men who are fitted through their experience to enter such classes, and their seriousness and enthusiasm must be a stimulant to the students in the regular courses of training, and so enable us to make these courses more beneficial.

I think then that the issue lies in a correlation of studies and a more thorough foundation. I believe in the study of economics and

in basing our studies upon that in so far as we can do so; a much more elaborate study of particular fields, such as transportation, banking, etc., an association, in so far as possible, with the practical side of life. Inculcate in young men the idea that there must be no self-conscious or petty side to the university trained man. Let the university trained and the untrained man go into the market under precisely the same conditions, and if the university trained man is not able to keep his own in the market, it is a reflection upon university training and he is not needed in the market of the day.

MR. MCLEISH

In my judgment the failure of the college trained man in commercial life is due less to his university training or to his defective social training than it is due to the man himself; to his want of sincerity, his want of honesty, his want of thoroughness, thoughtfulness and hard work. There are no prizes at all, there is no inducement at all to the young man who is in any of these senses defective in his college course. The shirk in college work will be a shirk in business. The man who thinks that commercial life is an easy way to get a living makes a mistake. The man who does not learn how to work, how to properly estimate his own powers and properly apply them to the university work of preparation to his entrance upon commercial life is certain to prove a failure when he does enter it.

SHOULD INSTRUCTION IN A UNIVERSITY COURSE IN
COMMERCE BE TECHNICAL?

By PROFESSOR H. S. PERSON, PH.D.

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It seems desirable at the beginning of this discussion to emphasize a distinction that is suggested in the arrangement of the program of this conference, the distinction between *technical courses* and *practice courses*. By a *technical*, or *practical*, course, I mean any course of study that has a measurable relation to the training of a man for some definite activity; by a *practice* course I mean a course of study that aims to train a man to perform with dexterity some activity—in most cases a physical, in rare cases a mental one. A technical course aims at imparting knowledge to be used later in the formation of judgments; a practice course at forming habits of action. The latter, a psychologist might say, selects some pathway of the discharge of nervous energy, and repeatedly works it until all incoming currents tend to escape by way of it; the technical course is one that aims to help the student to acquire knowledge concerning a business

and to acquire the power of forming good judgments in its pursuit. It may be that all practice courses are technical courses, but they form but a small portion of the whole group of technical courses. The present contribution to this discussion has reference to technical courses that are not practice courses.

In answer to your question as to whether a course of instruction in commerce of university rank should be technical, I beg leave in the first place to call your attention to the aim of higher commercial education as evidenced by its origin and development. Commercial education is one aspect of our general educational systems, differentiated and developed within recent years in response to what we believe to be a need of industry that has presented itself with the growing complexity of industrial affairs. The aim of commercial education is the aim of the educational system as a whole, intensified along certain lines. The aim of an educational system as a whole, especially of a system of free public education like our own, is, in the first place, for the social welfare, to raise the general level of intelligence, and in the second place, to select and equip in each new generation those best suited by natural aptitude and by training for the performance of the various social functions. The aim of education is equipment for service—efficiency in life.

The first aim of education, the raising of the general level of intelligence, is not to develop merely a passive better intelligence, but to develop better intelligence in action. As Adam Smith said, it is for better intelligence on the part of the people in judging of public affairs, while we add, it is for better intelligence in the doing of whatever the individual sets himself to do. No one, not even the extremist who maintains that the chief aim of education is "culture," would defend the suggestion that education should aim to develop *les hommes fainéants*. An intelligence that manifests itself in social life, in social service, in plying one's vocation, is the aim.

Education as a process of social selection in a democratic society is a conception of its function which has developed under the influence of recent habits of thought. It aims at increasing efficiency, primarily by affording all a broad general education, but also by selecting individuals differently constituted by nature for the performance of activities for which they are respectively best adapted. In this conception of education, efficiency is still more obviously the aim. Whether one takes the social point of view, that society is to secure better service; or whether one take the individual point of view, that the individual is to make a better success in life—increased efficiency is the central idea.

An educational system accomplishes this increasing of efficiency by the selection and training of favored individuals, *by the training of selected individuals* through the development of special organs, each

aiming to select and train for a special activity or group of activities. Each of these new organs is called into being by a recognition of the fact that some form of life work finds itself in complex conditions and in need of a higher degree of intelligence for the meeting of these conditions. As a society progresses, the number of such forms of life work increases. A century ago the minister needed special training, then the physician and the lawyer, then the engineer, then the electrical engineer and the civil engineer, then (I am not observing chronology) the teacher, then the teacher of the classics, the teacher of modern languages, the teacher of sciences, and now of history and of economics. Special knowledge in all these professions is demanded; in other words, greater technical efficiency.

That organ to which we have given the name commercial education, has developed according to the same general principle, and for the same general purpose—increased efficiency. In its earlier form it was based upon the recognition that certain classes of industrial activity required special skill in the performance of routine duties, and there appeared business colleges and commercial schools. In its later more highly developed form, to which we have given the name higher commercial education, it is based upon the recognition that business presents complex situations and that a high degree of special intelligence is required of men who are to handle these situations. So a quarter of a century ago a far-sighted man saw what business was beginning to require and the Wharton School appeared. In all of his utterances on the new movement I read a demand for greater efficiency. Less than a decade ago there was generally recognized what business has come to need, and that group of schools of which the commercial department of this university is one, came into being. In all the discussions through which the movement worked itself out, I find again the demand for increased efficiency in men entering business. I do not find the argument, "A course in commerce will attract students to my institution;" and but once or twice the statement, "A course in commerce will attract to the university and give to them a general training, men who would otherwise not see the advantage of higher education of any sort;" but rather the argument, "A course in commerce is needed by industry; it will increase to his own advantage the efficiency of the young man entering business, it will increase to the advantage of the business man the efficiency of the force which he employs, it will increase the efficiency of the United States in international trade."

Agreeing that the aim of education, especially of those organs of education whose function is one of selection, of training for special activities, is to secure greater efficiency in life work; and that higher commercial education is one of these special organs, we have established a satisfactory basis for a consideration of the nature of the in-

struction necessary to effect the purpose of university commercial education. It seems an almost obvious conclusion that the instruction should be technical. It is desirable, however, to examine this conclusion at length.

A more careful examination of the industrial situation which has given rise to commercial education, brings to light the following facts concerning that situation. First, that the more responsible positions in business activity require a broader foundation of knowledge than is acquired by the average man at the end of his preparatory school work, say at the age of eighteen. This is undeniably true if so-called experience in business no longer possesses the educational value it once possessed. Second, experience today does not have the educational value it formerly possessed, because the entrance into industrial service is through the channels of routine positions so specialized and narrow as not to afford the opportunity for contact with many sides of a business. The young man seldom enters business today as a general utility man—he enters as a routine clerk with limited activities. Third, not only is the position by which a young man enters business so specialized and narrow as to shut off the view of the business as a whole, but every important business as a whole has come to be so very complex and has developed so many sides that the mastering of it requires the most favorable circumstances. On the one hand, it has come to pass that every important business requires circumstances the most favorable for the mastering of it: on the other hand, it has come to pass that the routine position presents obstacles that make it almost impossible to master it as a whole. It seems now almost a *sine qua non* to rapid promotion from routine positions to managerial positions that the young man shall have *before* entering the routine position, not only a generally well trained mind but also as thorough a knowledge as possible of business in its broadest aspects. With such a knowledge his routine work will be a live, not a dead thing: he will perceive its relation to the whole; he will perceive the relation of his work to that of other clerks; he will perform his services rationally, not as a mere machine. A knowledge of these relationships is a prerequisite to the performance of responsible managerial duties.

We see in this analysis two demands made by the business world upon our educational institutions as leading to greater efficiency. There is a demand, on the one hand, that colleges shall send to it young men as intelligent and broad minded as possible. To meet this particular demand is not the special function of commercial education. It has been met and is now met by the non-commercial courses of the college. There is no question but that the college course which has no reference to business makes for efficiency in business by making the young man more capable of getting something out of his business

experience. It has its defects. It does not make for as great an efficiency in business as it would did it offer instruction in some subjects of a more commercial nature. That feature of college life which trains men to better meet their fellow men, which makes them more tactful, more able to adjust themselves to unexpected situations, and in that way more efficient, often produces a misdirection of energy, and does not conduce to professional enthusiasm. But after all, when the balance is struck, the ordinary college course is so successful in meeting the business world's first demand for efficiency, that we must look elsewhere for the *raison d'être* of commercial courses.

This is found in the second demand of business for instruction that shall increase the efficiency of the young man entering business. This second demand is for greater *technical* efficiency, not a technical efficiency substituted for the more general efficiency afforded by non-commercial instruction, but a technical efficiency in addition to and built upon the more general efficiency. It is in the addition of this technical efficiency that commercial education finds its justification. There is no sound ground for the addition of a series of business courses to the college curriculum that does not make up in an abundant measure by the addition of a new sort of efficiency for its encroachments upon the liberal course. For I believe that not to take the liberal arts course is for any college graduate a loss, and that loss is justifiable only by at least a corresponding gain along some other line. The only corresponding gain given by a commercial course which really deserves the name—that is a course offering something besides theoretical and applied economics—is the gain of increased technical efficiency. A commercial course that is only a course in economics renamed cannot justify itself in claiming to offer something other than was already offered by the liberal college course. A college with a well organized course in economics offers as much. The establishment of a new organ of commercial education must justify itself by offering something new and that new thing must be technical training.

This technical efficiency consists, of course, in a knowledge of technical facts, and in its highest forms what we may call, for want of a better term, of technical wisdom. It consists also of something more, of an *esprit* that we call professional enthusiasm. To inspire in the student an enthusiasm for that business which he intends to enter should be one of the most serious aims of commercial education. To create the force for its use is no less important than to give the student the instrument. Some of the most serious criticisms of college training for business, those of Mr. Carnegie, for instance, are based upon the failure of the college course to inspire business spirit. The demand of the business world for greater technical efficiency is a two-sided one; one side is for the efficiency that results from a knowledge of facts, the other side is for the efficiency that results from the possession of an

enthusiasm for one's chosen work. A commercial course that does not create, in the methods of its instruction and in the close grouping of its courses, this class *esprit*, is seriously defective.

I wish to avoid any possible misunderstanding by emphasizing my view that both the demands of the business world should be met in both of the respects mentioned; that young men should be well educated, broad minded men, and that they should be technically trained. I believe the first demand is best met by the liberal college course and college life; I believe the second is best met by the technical instruction and the professional enthusiasm of a genuine technical course. I believe both should be met. How to meet both is a problem of organization, of the relation of the commercial course to the general college course. That problem does not concern us here.

Assuming that we are agreed that the justification of higher commercial education is in its aim to meet the need of the industrial situation for greater technical efficiency, and that we are further agreed that the aim can be accomplished only through technical instruction, there are still present the very pertinent questions, "Can there be such a thing as a technical higher commercial education? and what are the component courses that go to make up a technical commercial course?" I wish to consider each of these questions in turn.

First, the conventional college course is not a technical course and should not be. As I have already said, it does increase indirectly the efficiency of the average young man entering business by making him a more intelligent, broad minded man. But so it does with the young man entering engineering, the law, medicine and any other field of activity. In my judgment it gives what no technical course can give, but the technical course, on the other hand, offers what no general college course can offer. They are different influences producing distinct efficiencies.

Second, the conventional college course modified by the addition to its curriculum of numerous unusual courses in economics, courses sometimes called commercial, is not a technical commercial course, is not according to the views we have advanced, a commercial course at all. It is a richer general college course. It may make a man a better informed man for business purposes; it may afford the desirable foundation for a real commercial course, but it is not in itself such a course.

Third, neither is the conventional college course modified by the addition of practice courses such as are offered by the business college a genuine higher commercial course. It deprives the student of more opportunities than it adds. To induce a student of undergraduate maturity to spend his time at college practicing the forms of accounting, typewriting or stenography for the mere sake of the practice, is a waste both of the student's time and of the college's expensive plant. Any student with the minimum of energy necessary for success in

business life can acquire these of a vacation, in even the smallest village. With regard to accounting, I would make a reservation; it may be, and in most instances is offered for something more valuable than the practice.

Fourth, a truly higher commercial course is one in which there are grouped together in close relation technical courses; courses that are not practice courses except where a practice course may be an instrument of instruction for more important matter; courses that instruct in those facts of business that bear upon the live problems of the business world; courses that handle business directly and concretely. Such a curriculum, both by the grouping in close relation of its component courses and by the technical treatment of business facts and problems in these component courses, justifies its offering itself as a higher commercial course because it promotes technical efficiency. What, then, are these component courses that we call technical?

Let us examine first the course in accounting. This course is always a practical course but in many instances is not handled in a way that makes it worthy to be given a place in the curriculum of an institution of higher commercial education. If the instructor's aim is to direct the student in making a certain number of entries according to certain prescribed rules which the student must memorize, the course does not measure up to the standard of a course in higher education. A course that attempts to teach the petty details of an accounting department wastes the student's time, for the particular institution which he enters may not use that detail, and whatever detail it does use will be readily learned in the first week of service. A course in accounting, however, in which the making of entries in peculiarly ruled blank books is, like the use of a slide rule, a subsidiary process, in which the real purpose is to work out the theory of business organization, the real nature of profits, the forces that influence profits, the nature and causes of depreciation, and so on is a practical course worthy of study by the maturest college mind. Let the instruction dwell, not upon whether borrowed capital should be entered in some debit or some credit column, but upon the relative influence in business of an institution's own and of borrowed capital as evidenced by the records of the accountant's books. Such a course is a practical course that is not a mere practice course.

Let us consider the course of instruction that is intended to equip a young man for the business of an import and export merchant. Shall it consist of the addition to the conventional college course of a course in the history of commerce which tells the student of the commerce of the Egyptians, the Greeks and of the trade routes and commodities of exchange of the thirteenth century? There is nothing in such material of instruction to warrant the name "commercial instruction;" it is instruction in history and valuable as such in its proper place.

Let the course for the student we now have in mind lead him to ask himself and answer for himself such inquiries as these: with what countries and with what commodities is the foreign trade of the United States increasing? What are the conditions to the permanency of such increase? What is the routine of the import and export merchant's office and what is the value to the business of this routine? What is the significance of the different regulations of different shipping lines? What is the practical and the legal nature of each of the phases of the bill of lading? What is general average? Particular average? Such questions as these are practical and technical, involve in their consideration great mental acumen, are what a young man should consider *before* entering service, and add that sort of efficiency which business demands of higher commercial education.

Let us consider, for further illustration, a commercial course adapted to the needs of a young man looking forward to the career of a banker. Should it consist of the courses in economics, especially of finance, money and banking? By all means. These economic courses, however, were developed without special reference to commercial education. The process of picking them out of a university curriculum and naming them commercial courses does not establish a course in higher education in banking, something new offering a special training in banking. The new organ comes into existence only when courses looking toward instruction in technical matters are established. In addition to studying the theory and history of money and banking, the student should be led to investigate the practical operations of banking, not for the purpose of learning routine, but for the purpose of learning what routine is for, what of it is good, what of it is obsolete. He should study the law of banking, not as a course in jurisprudence, not with the view of becoming able to dispense with legal services, but in order to know what may be his responsibilities as cashier, president or director. He should study foreign exchange; not only the theory of foreign exchange but the practical operations of foreign exchange. Let him learn to know thoroughly all of the factors that must enter to make a documentary bill of exchange valid and safe; let him learn how to work out the problem of transferring money, to determine for instance, from which center,—Paris, Berlin or Vienna.—it is cheaper to transfer money at a given time and under the given circumstances. Let the subject matter of his courses be the same as the subject matter of the discussions before bankers' associations. Offer him a course in corporation finance; one that is not merely a course in Wall Street terminology, but one that will enable him to take the reports over a series of years of any corporation, and work out, so far as those reports may have intended to permit him to work out, the policy and the financial condition of that corporation. Such instruction as this is, in my judgment, instruction that will add an efficiency that the non-

technical instruction cannot add. The business world asks of the college that efficiency which comes from the mental strengthening of a college or university course; but it asks of commercial training another sort of efficiency, the efficiency of technical knowledge and of professional enthusiasm.

THE CHARACTER OF COMMERCIAL EDUCATION: SHOULD IT BE TECHNICAL?

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The expression "technical education" is plain and needs little discussion. A technical commercial education means an education in the technique of business, that is in the practical routine of commercial operations. A man with a technical commercial education is fitted to take some position in the business organization and do the work which that position demands, more or less successfully, according to his ability, as soon as he has become acquainted with the local conditions of the office and of the business. In banking, technical commercial education involves a knowledge of and practical experience in the organization and operation of a bank, the routine work of the president, teller, cashier, and auditor, the methods in use in collecting out-of-town checks, of placing and securing loans, of collecting and disbursing funds, etc. In insurance, such an education requires a practical knowledge of the organization of the agency force, the work of the general and special agents in securing applications and writing up such applicants for the proper policies, and the work of the finance department in caring for the reserve funds. In general manufacturing business, a commercial technical education demands a practical knowledge of the organization of the company and of the office; the duties, powers and work of the stockholders, directors, and officers; the actual methods of the credit department, the sales department, the advertising department, the auditing and accounting department, the methods of purchasing material, keeping stock, shipping goods, etc., etc.

A non-technical commercial education, on the other hand, fits one to understand the general organization of industry and its workings without at the same time being able to take part successfully in its practical operation; to understand the importance of generous natural resources, of abundant capital, of skilled laborers and of wise industrial leaders without necessarily being a great captain of industry; in short to understand economic and social conditions, the play of economic forces and the limitations imposed by political regulations upon business operations. Such an education must of necessity be supplemented by practical experience in business management but when so

supplemented would, it must be admitted, fit any man well endowed with brains and health to command success in the world of affairs.

It is generally conceded that it is entirely practicable to train men for definite positions in the business organization in connection with their general education. This is being done successfully in trade schools, in business colleges, and in technical schools. Can similar methods and a corresponding commercial education be provided for the prospective business man with equally good results? The answer to this question will depend quite largely upon the answer to another: "For what kind of positions in the business organization are our commerce students preparing?"

The business world is an exceedingly complex organization; its work is minutely subdivided and parcelled out to many distinct classes of workers. It is able to offer therefore all kinds of business positions from the general utility man in the small office to the presidency of the billion dollar steel company. The university graduate, while he will in all probability be obliged to begin near the foot of the ladder, is nevertheless definitely preparing himself for a position of trust and responsibility in the not too far distant future. He aspires to become a manager of agencies rather than simply an agent; the head of a department in a manufacturing company rather than the most skillful stenographer; an auditor rather than a bookkeeper; a statistician rather than a human adding machine. Such being the case it is of course evident that the character of the education should be shaped by the end in view.

Two considerations may be urged:

(1) The work for which the college student of commerce is preparing demands a broad general education rather than a narrow technical one. Positions of responsibility require good judgment in regard to present economic conditions and the prospects for the future, an extensive knowledge of the market and market facilities of different states and different countries, a comprehensive grasp of the characteristic features of the present industrial organization and of the changes taking place within it, together with the causes and effects of such changes; a considerable acquaintance with economic history and a somewhat more detailed knowledge of the internal organization of the typical corporation and its various departments; and the general principles of private finance, accounting and commercial law. All these subjects lend themselves readily to university instruction. Moreover the young man who enters upon his business career without such instruction is fortunate indeed if he has either the time or opportunity to secure that broad understanding of business conditions which such an education gives. The business organization has grown so complex, the division of employment within it has been carried to such limits, each kind of work is so differentiated from every other

kind of work in character and methods, each clerk and each officer is so constantly immersed in his own tasks and his own problems that the young man entering the organization in one definite position soon finds himself lost in the routine of his own duties unless he is possessed of extraordinary ability, exceptional means or exceedingly fortunate business connections. Further, to obtain a general knowledge of the economic world through actual experience in all of the important departments of a well organized business house leaves the possessor of knowledge so gained hopelessly behind in the race. Except for the fortunate few, therefore, a general knowledge of economic conditions, of industrial organization and the structure of modern business must be obtained in the university or not at all.

(2) The most efficient training in the technique of business is unquestionably that furnished by actual experience in business life. Moreover the graduate of the university course in commerce must of necessity receive such training whether he wills or no. However well trained he may be in the technique of industry in the school of commerce, he is obliged to take a subordinate position and work up. The colleges are not attempting to turn out fully equipped Morgans, Fields and Carnegies on commencement day. At the most, they may reasonably hope that from their among ranks a part of the future leaders, together with many subordinates, of the world of finance, trade and industry may come. Consequently the university trained business man must serve an apprenticeship of greater or less duration. Such apprenticeship will consist almost entirely of technical training in his chosen field of work. In case his collegiate commercial education has been shaped with the idea of gaining a comprehensive knowledge of the industrial organization and economic conditions, the technical training that he subsequently obtains will form the natural supplement to his college course. In the alternate case, there is great danger at least that the college course will duplicate the business apprenticeship and attempt to do the same work with far less efficiency.

It is urged that it is practicable to so arrange the commercial course that the technical training will accompany and thus supplement the more general business education. Such a contention undoubtedly has considerable validity but underrates the time that a broad general education appropriate for the young man who is to occupy a responsible position in the business world demands. Such an education should include: 1. Training in the use of the tools daily employed by the educated business man, viz: reading, writing, arithmetic, language, including in most cases one or more foreign languages and drawing. Such training is fundamental in its nature and necessarily occupies most of the time during the primary school, a major portion of the high school period, and a considerable part of the college course. 2. An elementary knowledge at least of physical

geography, geology, botany, physics, chemistry, and astronomy in both their scientific and economic aspects. This group of subjects might be crowded into a minor portion of the high school and college course. Considering the important part science plays in modern industry they cannot safely be omitted. 3. A thorough understanding of the social and political conditions under which business is conducted. This part of the course ought to include a study of local, national and foreign political institutions and of social organization at least so far as such institutions and organization condition and limit commercial operations. To these should be added a general knowledge of international law and a more specialized study of commercial law. This group of studies may be begun in the high school but will necessarily occupy an important place in the college course. Such studies will of course be largely supplemented by experience and observation in the world of affairs. 4. A mastery of the principles of economic law and its applications to the problems of the business world. This part of the course naturally furnishes the backbone of the university work in commerce and includes commercial geography, economic history, economic principles, statistics, and the organization and administration of commerce, industry, finance and transportation. 5. Technical training in business operations, including the organization of a business office, the proper division of responsibility, and the routine work of the various departments, purchasing, manufacturing, sales, advertising, accounting, filing records, voucher systems, office devices, etc. Such training may be furnished in connection with the college course in commerce, as a graduate course following such a course, or in the business world.

Two questions naturally arise at this point:

(1) Is the technical training in business afforded by the university course an effective substitute for that furnished by practical experience in business? (2) Granting that such training may be provided, is it possible to arrange such a course of study without sacrificing essential subjects in that broad education demanded by modern conditions on the one hand or without unduly prolonging the university course in commerce on the other?

A final answer cannot be given to the first question at the present time. This much, however, may be said with entire confidence. So far as business practice is reduced to a science, it presents no inherent difficulties as a subject for collegiate instruction. Such instruction will demand teachers who are masters of business routine and a somewhat extensive equipment. It cannot be made effective by lectures, reading, the use of lantern slides or the inspection of sample pages from a loose-leaf ledger. It necessitates an extensive equipment and actual experience in the manipulation of machines, tools, office books, vouchers, cost systems, letter files, and other devices of the modern

office. Technical commercial education thus demands two radical changes from present conditions: (1) The employment of experienced business men to take charge of the technical work, and (2) a commodious building equipped with a model office for the use of the students. With these changed conditions, the students would naturally organize themselves into partnerships and corporations and actually conduct certain kinds of business by a use of merchandise cards. They would organize a bank, trade with each other, carry on correspondence, arrange a filing system, keep books, advertise their business, make annual reports, prepare statistical charts, undertake audits and finally dissolve the company and distribute the assets to the owners. Technical commercial education more extensive and more elaborate than that here outlined is not only possible, it is actually being carried on in some of the universities and in many business colleges. That is it practical to train students by this method for routine positions in business must be conceded; but that such education is an effective substitute of the training furnished by actual business experience is as yet open to doubt. In the first place, only a part of the ordinary business practice has as yet been reduced to a system. For those important fields in modern business not yet on a scientific basis only actual experience in real business furnishes an adequate preparation. In the second place, such training is based upon paper transactions none of which call for the exercise of business judgment. In the real business world, the shaping of policies, not the execution of routine tasks, is the work of the business administrator. Here the exercise of sound business judgment is rewarded with adequate economic gain; of bad judgment, with a corresponding loss. Experience in the business world thus educates the business judgment, while that provided by the college course in the technique of business will at the most give skill and facility in business routine. The latter training may be made a valuable aid to the former but never an effective substitute.

(2) The second question is more important and even more difficult to answer. The successful business man of the future must be broadly educated. The complexity of the organization, the intricacy of market conditions and the enormous size of the representative business establishment all unite to demand this of the future business manager. He ought also to be prepared to enter relatively early in life upon his business career. The course of study outlined in a preceding section, even omitting the technical training, can hardly be completed during the regular college course. To substitute technical training for a part of the general education there provided would seriously narrow that broad education which is becoming more and more necessary. To add the technical training to the commercial course as a graduate year or years would extend the education for the prospective business man to a length equal to that provided for the best trained

lawyer or physician. After his education is completed, he still must serve an apprenticeship in the office of several years duration before he is fitted to take a position of exacting responsibility. In the case of the average business man, it is doubtful if such a prolongation of the educational period is desirable. If the technical training of the college is an indispensable part of the ideal preparation for business it would in his case be better to substitute such training for the least essential subjects in the more general courses. For the exceptional man, the longer and more complete course of study combining both a broad education and a technical one will probably prove more advantageous providing the technical education be given by competent instructors and with adequate equipment. If it shall prove feasible to give technical commercial training in the colleges so efficiently that students enjoying the same are thereby enabled to appreciably shorten their apprenticeship period such training will be desirable for both classes. To achieve such an end is the problem before the university schools of commerce to-day. Fortunately this experiment is being tried at several institutions of higher learning at the present time. The University of Wisconsin has adopted the plan of including the technical training in the regular college business course, thus supplementing the more general courses and allowing it to take the place of an equivalent amount of college work; on the other hand, the Tuck School of Dartmouth College has added the technical training as a graduate school of commerce, the technical work thus following the more general courses of the college period. While our discussion may serve to interchange ideas and thus call attention to the probable strength and weakness of the various methods, we may await in confidence for a final answer as a result of these several experiments. Undoubtedly the result will be quite largely conditioned by the skill and ability with which the experiments are conducted.

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We may start with the assumption that new courses are to be given in schools of commerce; that a commercial education will be distinctly made up of new courses and not a regrouping of old ones under a new title of commercial education. I agree with Professor Person that a course made up in this way is not worthy to be called a course in commercial education. I think we all likewise agree with him that the incorporation of practice courses in our high schools and commercial colleges will not attain the end we want.

It is true, and fortunate for our university finances, that many courses that have been given in the past may very well be used in the courses in commerce because the modern university has such a breadth and variety of instruction, and the aim of all educational systems is

common enough to make many courses valuable for the business man as well as for those who are to enter professional careers. Some of these courses are called cultural, and we shall have to make use of any courses in history, general economics, English and foreign languages which may come under this head. These courses, when pursued by students in the first year of their course, will require little, if any, modification to suit our needs.

In addition to these, there are to be found in all well equipped universities certain courses which are essentially business in character, and we may also utilize these without change, in our commercial education, or at least make them elective for students in particular lines. We have at the Ohio State University in the agricultural college, for example, courses on Live Stock and Commerce, on Sources of Supply and Market Classification of Wools, on Farm Management, History of Agriculture and Agricultural Economics; in botany and horticulture, courses on Forestry and Forest Economics; in civil engineering, courses on Railway Location; in industrial arts, courses on Tools and Machines, Shop Equipment and Management; in the department of mining engineering, a course on Mine Operation and Accounting, and in the law school courses on Contracts, Negotiable Instruments and Private and Municipal Corporations. Those of you from other universities can easily think of similar courses in your own institution which could be made available for this purpose. Then we may by use of the elective system, and not following any hard and fast lines, arrange it so that a man who expects to enter business may be allowed to select such courses as the above and secure some knowledge of the technical side of business. There may be some internal difficulties about credit for such work, etc., but these are questions which we need not discuss here. But these courses in combination with the general cultural courses already mentioned are not sufficient to constitute a course in commercial education. Under the elective system any student could have selected such courses as he needed for a particular business from among these courses, but we could not have called that a new departure. We need in addition courses which have distinctly in mind our purposes and will have a direct bearing upon business lines.

We are here confronted with the question, what is the purpose to be accomplished, the aim of the course? Bluntly put (although I am aware that some may take exception to this way of putting it and accuse us of pandering to low ideals), the aim of the course is to teach boys to make money. We have avoided putting it in just this way but say instead we want to teach boys to promote industry, and efficiency, etc. As long as we remember the old proverb that the "shoemaker's children go barefooted," we may console ourselves with the thought that to invite young men to study from college professors the art of money-making is not the only paradoxical situation which

the world offers. Nor need we consider that we have lowered our ideals in endeavoring to give instruction along these lines for the purpose indicated. When we consider that nine-tenths of the people give three-fourths of their time to work, the question of making money should not be considered undignified or unworthy of pursuit. And if this is capable of being taught, it should find a place in our higher educational institutions. No greater service can be done by a teacher than to train men who expect to enter industrial callings to pursue wealth by legitimate methods. In the last twelve months we have had our attention called frequently to the low standard of morality prevailing in high circles. One of the best means of meeting this difficulty, then, is to forewarn young men (for forewarned is forearmed) against those methods by teaching them what are the legitimate methods, and this knowledge ought to make it easier for men who pursue fair commercial methods to compete with those who pursue unfair tactics.

If we agree, then, on the purpose of these courses, the next question is, what work may we offer that will best enable our graduates to attain this end? Should this instruction be made technical? If we accept the narrower meaning of the word technical, such as Huxley has in mind when he says, "Technical education is that sort which is specially adapted to the needs of men whose business in life it is to pursue some kind of handicraft," I think that our answer will have to be largely, though not entirely in the negative. I have sometimes had a feeling that the courses in commerce might more properly be organized as departments in the college of engineering rather than that of arts and sciences, since the class of men most likely to be attracted by these new courses would hitherto have been attracted to the engineering rather than to the arts college. But certainly courses in banking and insurance, for example, would seem more suited to the college of arts and sciences.

But I have no doubt that in this discussion the word technical was intended to be taken in its broader sense as referring to that method which is especially appropriate to any business or profession. Having this meaning of the word in mind, I feel that our answer should be in the affirmative. If we are to train men for a particular calling, it is our business to make the instruction as definite as possible and to furnish whatever information we can which has a direct bearing upon the particular occupation. Viewed in this light, the question is as to whether the courses we are to arrange fall within the general field of economics. My own feeling is that they do. Our study of economics in the past, so far as it has had a constructive purpose in view, has been devoted to an effort to influence public policy, mainly through legislation. With business ends in view our work must be largely within the field of descriptive economics. Hitherto the purposes which we have had in view have required emphasis upon other as-

pects of economics. Our present task must be, therefore, to furnish as detailed an analysis of the present industrial structure as the materials we are able to gather will allow. In so doing we must keep in constant touch with the business classes and secure the coöperation of business men within and without the class room. In this connection let us see what the university is able to furnish in the way of instruction along a particular line, that of manufacturing.

In treating this subject we ought to be able to give useful information as to the causes which determine the localization of industries, the degree to which the success of these industries is dependent upon the physical and social environment. A discussion of the forms of industrial undertakings may well be entered upon with a view to showing how far market conditions affect the form of the enterprise. We discover a tendency toward the corporate form of organization and we should be able to point out the nature of the modern corporation, the conditions under which charters are granted, what privileges they carry, what limitations are placed upon them. We should discuss the way in which capital is provided, the kinds of stock issued, and the variety of securities with their relative advantages. The internal organization of typical manufacturing plants may be described as well as the functions and relations of the different departments; the sources and methods of securing raw material; of marketing goods; the various methods by which labor may be secured; what is being done to promote efficiency of labor, and the relations of employers to labor organizations. Most of these subjects have been inadequately treated in the general and special works in economics, but there is a growing body of literature dealing with these subjects appearing especially in public reports and in the various technical and trade journals. This should be supplemented by direct observation on the part of the student of manufacturing plants in his own neighborhood or that of the university.

Such study as I have briefly outlined would be a technical presentation of this subject and, properly worked out, ought to furnish as complete a guide to the man who enters the administrative department of a manufacturing plant as does the course in mechanical or electrical engineering to the man who takes charge of certain of the processes of manufacture.

The technical side of a commercial course in a university may perhaps be summed up in these words. In any industry, be it banking, insurance, transportation, manufacturing or commerce, the student should be made familiar with the functions of every department of a typical business within the industry; should understand the relations of each department with every other department and to the industry as a whole; and, finally, should appreciate the relations of the entire business unit to other business units in the same industry and to other industries, institutions and markets.

SECOND SESSION

THE ESSENTIALS OF A COMMERCIAL COURSE FOR HIGH SCHOOLS

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According to the report of the Commissioner of Education, there were, in 1894, fifteen thousand students pursuing commercial studies in the public high schools of the United States. In 1902, that number had increased to 76,000. This remarkable growth testifies eloquently to a great present-day need in secondary education, and puts upon those in authority the task of making provision for adequate school training for business. European countries, almost without exception, have done much for commercial education, but until recently our reliance has been almost wholly upon the so-called "business colleges." These institutions have been, and still are, extremely useful; but the demand is now for a business training which involves much more intensive and extensive study than is possible with the highly specialized curriculum of the business college, and in the very brief time which such institutions demand and secure from the pupils. It very properly falls to the secondary school to undertake the work, and it is my province in this paper to point out as best I may just what program of study seems best adapted to the purpose.

At the outset, it should be made clear that a highly trained intelligence is as essential in business as in professional life. Trade has long since ceased to be simple barter. Its rules and processes can no longer be picked up by the fairly intelligent in a few weeks. In its higher phases it puts to the test the keenest mind, and in its ordinary phases it affords ample opportunity for the exercise of more than ordinary gifts. The old-line commercial course of the "business college" assumed that a certain technical facility was practically all that was necessary, and so its studies were what might be called form studies. Of content, there was little or none. The modern commercial course must be based upon the assumption of a need for broad and thorough training—broader and more thorough than can be gained by a pursuit of the familiar "business college" subjects. Indeed, it is my conviction that, with the exception of the dead languages, there is scarcely a single standard secondary subject which cannot be very profitably included in a commercial curriculum. But it should be immediately added they must be given the sort of treatment that will yield the most valuable returns for commercial purposes.

To illustrate: History has come to be a favored secondary subject, the emphasis ordinarily being upon political lines. In a commercial course, the emphasis should be shifted to economic and commercial phases. Indeed, it is my belief that this is the best thing to do in even the classical school. In modern history, for instance, such topics as the following would be given due consideration:

Security for labor from state authority;
 Nation, the unit of economic organization;
 Capital assumes large proportions, and enters colonial enterprises;
 Recasting of commercial and industrial practice;
 Mercantile system;
 Rival commercial empires seeking colonies, treasure, shipping.
 Colonial economic policy of Europe;
 The industrial revolutions;
 Inventions;
 Unstable industrial conditions;
 Factory system;
 Re-adaption and reconstruction of economic life;
 Cosmopolitanism superseding nationalism;
 Study of commercial conditions in Europe at the present time.

All of this can be made highly interesting to the secondary student, and he can be led through a careful study of English and continental history along these lines—by no means to the entire exclusion of other lines—to a fairly adequate understanding of present-day industrialism and commercialism.

The immense importance of training in English cannot be too strongly emphasized. In connection with the usual work of the secondary English course there should be continuous and progressive training, directed immediately toward commercial ends. The training should include such matters as letter writing, with drill in ordinary business idioms; preparation of telegrams; writing and answering of advertisements; oral and written reports on foreign commercial news; study of biographies of successful men of affairs; preparation of a careful discussion on some particular trade or profession; treatment of topics of commercial and business interest after the manner of the newspaper editorial. Nor should training in effective oral expression be neglected. The power of concise and pointed speech is of much moment to the business man.

As to languages other than English, it need hardly be said that the modern tongues only should be given a place in the commercial curriculum; for, in addition to their disciplinary and culture value, they are of immediate importance in large commercial centers, especially in importing and exporting houses.

In a first-class commercial school, the graduate of a four-year course should be expected to speak at least one foreign language with

a fair degree of fluency. In other words, merely reading knowledge is entirely inadequate for the young man who proposes to turn his study to actual use in business. It is rather interesting to note in passing that from several persons prominent in promoting foreign trade, there has recently come a demand for the teaching of Japanese!

In connection with a study of German or French or Spanish, there are excellent opportunities for giving the pupil an intimate acquaintance with the commercial activities of a foreign country. Admirable texts for the purpose have already been published, and better ones will be put forth to meet the growing demand.

In any school of modern type, science will be given a prominent place in the curriculum. To me it seems so important that I would prescribe it for at least three years of the High School Course. For there is not alone the valuable scientific training—the development of powers of doing and seeing and drawing conclusions at first hand—but there are also the numerous incidental applications to commercial purposes. Biology, for instance, introduces the pupil to the raw materials of commerce, their distribution, production, growth, and relative values. Chemistry acquaints the pupil with many processes by which crude material is transformed into the manufactured product. Physics familiarizes him with the fundamental transformations of energy involved in all mechanical operations. Indeed, the scientific phase of its work should be a distinguishing characteristic of a school of commerce; for the modern industrial world in which the business man finds his sphere of action touches science at every turn.

While it may not be desirable to give mathematics the prominent place in a commercial school it occupies in the ordinary secondary school, the subject should, by no means, be slighted. Algebra and geometry, with their definitely settled educational values, furnish a sort of discipline which the intending business man needs, and I cannot at all agree with the German writer who contends that commercial arithmetic furnishes the same discipline.

Drawing has a peculiar value for a commercial school. The refinement of taste which it develops is alone sufficient reason for giving it a place in the curriculum. Aesthetic form is the chief element of worth in many a commodity which finds wide sale in a civilized community. In this respect, America has much to learn from her European competitors. It requires but a casual study of present-day advertisements to see what a big field has been opened up to art in that one phase of business.

Another liberal subject hitherto studied almost exclusively in the college deserves an important place in the commercial curriculum. Economics lends itself readily to advantageous treatment in the secondary school. The laws governing the production, exchange, and distribution of wealth are within the comprehension of the high-

school senior, though he may not any better than his college brother grasp all their subtleties. Economics presents for the pupil's consideration data of the most interesting character, and in its practical applications touches upon nearly all of the vital social and political questions of the day. Banking and finance, international trade, taxation, socialism, all fall within the scope of the subject. And from the purely disciplinary point of view, economics is peculiarly adapted to advanced secondary instruction. Its laws and principles are drawn from facts which must be carefully weighed and balanced. It trains the pupil to reach conclusions based upon considerations of a complex character. The syllogism of mathematics is not the syllogism of every-day life. The man of affairs cannot proceed from absolutely fixed premises to definite and unvarying conclusions. The value of his judgment will depend upon the ability to give proper weight to a variety of elements which make up his premises. For training in this sort of practical reasoning a better subject than economics could not be selected. Closely related to economics is economic or commercial geography. The latter throws into broad relief the division of labor—perhaps the most marked feature of modern industrial conditions, and the fundamental basis of trade and commerce. In a large community the study of commercial geography would naturally begin with a study of local industries, from which it would broaden in a regular, orderly way to the large aspects of trade, domestic and foreign.

Thus far we have spoken of the typical secondary subjects, common in all good high schools with the exception of economics and commercial geography. A program of studies in a commercial school would not in a mere statement of the subjects differ very much from the program in the ordinary high school. What is insisted upon is that they should be taught as far as possible with a commercial bias.

There remains for our consideration the group of studies which are directly and immediately commercial. The business activities of to-day require from those who would undertake them the ability to write a good hand, to use figures with accuracy and dispatch, to keep accounts with intelligence and economy of time and effort. To these equipments may be added a familiarity with business forms and documents, the laws governing their use, and some knowledge of office economy. In many instances, a knowledge of stenography and typewriting is essential, and in any case it is a valuable addition to the young business man's equipment. The commercial course should therefore include business writing and arithmetic, bookkeeping, business correspondence, and office practice, commercial law, and stenography and typewriting. Business writing and business arithmetic should come early in the course to find their steady application in the later work of the school. Bookkeeping is by no means an easy study if properly taught. It does not seem advisable to begin it before the second year of the

course, and provision should be made for its study in the third and fourth years. Competent observers feel that bookkeeping as usually taught is not made to show its real educational value. It is certainly possible to make the instruction in accounts center about certain definite principles. It is by no means necessary for the pupil merely to follow a model in the spirit of an unthinking imitator. In commercial law, also, that instruction cannot be called successful which aims only at giving the pupil a certain body of facts. The subject lends itself to a treatment which is in no small degree scientific. It has been the fashion in four-year commercial courses to postpone the study of stenography to the late years of the course. This is hardly defensible. Pupils in the first and second years may with profit pursue the study of shorthand, and the many opportunities for its use in school makes it possible for them to secure a practical training, insuring speed and accuracy at graduation. Business correspondence and office practice come more properly after a preliminary training which has made the pupil familiar with many details of business usage. It is perhaps not unwise to place them in the fourth year of the program.

Briefly stated, it should be the aim of the commercial school to give the requisite technical equipment for business, but also to go far beyond that, and by a wise application of practically all the standard secondary subjects to commercial uses to give a depth and breadth of preparation that will insure an all-around efficiency, an easy adaptability to new and important tasks, and a degree of initiative. The graduate of the commercial high school will be by no means a finished business man. But no law school expects its graduates to be finished lawyers, and no medical school assumes that its graduates will be finished physicians. There is much that the successful business man must know which no school can teach, just as there is much in the practice of law for which no school offers a prescription. And yet the day has gone by when law is learned by reading in a lawyer's office. The law school has become practically indispensable. And the day is fast passing, with the remarkable specialization of all commercial and industrial activities, when a desirable all-around training in business can be secured in a business house. The new recruit is assigned to some restricted task, with small outlook into other fields, and unless he has more than ordinary energies and initiative, or is possessed of influence, he is likely to have little opportunity for broader experience.

The sort of course here outlined not only amply meets the demands of the business world, assuring to those who finish it a well-rounded equipment in a necessarily elementary way for affairs, but it does more than that. It opens the way to the higher school of commerce, the technical school or college, and thus in every way fills the definition of the modern secondary school. There is a surprisingly large number

of parents who desire for their children the business training which a commercial school gives, and at the same time are anxious that adequate preparation for college shall go with it. A well arranged commercial course may easily assure both things, and in course of time the commercial courses of the universities ought to attract goodly numbers of students who have had the preparation afforded by a commercial secondary school.

THE CORRELATION OF HIGH SCHOOL AND UNIVERSITY COURSES IN COMMERCIAL STUDIES

By PRINCIPAL J. E. ARMSTRONG, A. M.
Englewood High School, Chicago

Correlation presumes that two things exist and that between them a mutual or reciprocal relation is to be established. This I feel is almost a mistake, for there is scarcely a distinct or well defined notion among high school men of a commercial course. No such doubt exists if we speak of a classical course or a manual training course. To the average patron of the high school, a commercial course means a course in bookkeeping. This is doubtless due largely to the commercialism of the so-called business college. If we confine our discussion to this conception of commercial courses, there will certainly be nothing to correlate. Children from the sixth and seventh grades of our public schools are learning to record imaginary business transactions or to write rapidly and spell phonetically in order to obtain a position in a business house. Whether this in any way prepares them to engage in business or to fill a place of responsibility and trust or not, is another matter. Parents are willing to toil and sacrifice to give their children this brief automatic training because of the slight advantage it will give. I suspect part of it is due to the esteem they hold for the name, "Business Education." Business men are partly at fault for this erroneous conception of business education, for, until very recently, many of them gave preference to the boy of twelve with a three months' business college course, because it was supposed he would be more teachable than the high school boy, and would do his task without question about the method. The boy with more of a mind of his own was thought to be too independent. In other words, the one who could become a machine to grind out dollars was what they desired.

Thanks to the coöperation of an increasing number of secondary schools and the operation of the child labor laws there is now a greater demand for the high school graduate. In fact many of the large business houses and corporations will not employ any boy who is not a high school graduate.

Possibly the lack of proper ideals among educators themselves, and their natural conservatism are at fault. As President James once pointed out, classical school men bitterly opposed the introduction of science into the high schools. Later, classical and science men united to oppose manual training; and now possibly all three are united against their supposed common enemy, commercial education. If the essence of education is found only in the sacred walks of our fathers, perhaps this is a holy warfare; but to my way of thinking it is not true. Who has not met a liberal minded, refined man or woman whose soul seemed touched with intellectual fire, who recognized the broad relations of humanity, who reasoned logically and yet had but little school learning? Have we not placed too much emphasis upon certain training as essential to culture? Our whole system of education seems to assume that all minds are so nearly alike that the same intellectual diet will nourish all; and then we excuse ourselves for starving some and overfeeding others by blaming heredity and environment. I once transplanted a little flowering plant from a cold mountain top to a sunny spot in a fertile garden. On its native rocks, ice-bound the greater part of the year, it had lived a tiny dwarf. In its new home, it grew to great size, bloomed profusely, and perished in one short season. Many a palm that would have become a stately tree in its native clime, lives a miserable, sickly caricature in a darkened parlor. We seem to say that if the human plant cannot flourish on the diet we offer, let it die rather than to offend our gods of learning.

It is stated on good authority, that the hosts of youths who go through our schools will soon forget their Latin and in ten years from the time they leave school they will not be able to read a dozen lines of Cicero; nor will they be able to tell why the three angles of a triangle are equal to two right angles. Claim what we may for the power they have gained, and the ability to think logically, yet there is great loss, a waste of energy that possibly could have been saved. I dare to say we send out some conspicuous failures, judged by our ordinary standards, who eventually find their way to places of great trust, responsibility, and honor, and are recognized as people of culture. It must be that there are other means of culture that lie outside the school curriculum.

A vast majority of the pupils who go through our schools must eventually find a place in the business world. Only one here and there can become a professional man. We need not dwell upon the common need of the rudiments of an education as provided in our splendid system of public schools; but after the child reaches the age of adolescence, we recognize the need of studies that call forth the exercise of the powers of the soul. Is it not reasonable to suppose that those activities that are to occupy the waking hours of the masses of the people engaged in a keen struggle for existence or su-

premacy will furnish a stimulus to mental activity? Self-activity, which we failed to awaken while in school, was the mainspring to success and culture. It lay coiled, full of energy, awaiting the master hand that could set it free. We give the would-be doctor all that science can bring to his assistance. We give the embryo lawyer all that history, government, and logic can contribute to his assistance. Why not give the future business man what we can of knowledge and discipline along the line of, and in, his chosen work? The laws of trade are more important to him than the laws of Solon or the logic of Plato. There are laws governing the production of corn and pork as certain as the laws of falling bodies. We have relied too long upon the chances for a man to master both scholastic and business laws. Life for the majority of men is too short. Splendid mental discipline can be found in common things that lie close to the heart of the daily toiler. We have allowed to lie neglected a vast fertile field. It is filled with plants that bear precious grains, luscious fruits, as well as noxious weeds. In adjoining fields, we have set the useful plants in rows, arranging those of a kind together and removed the weeds. A little work bestowed upon the *other* field would greatly increase our harvest.

Let no one think that I am opposed to the study of Latin. Two-thirds of my pupils take Latin with my approval. It is, to many, a splendid highway to the culture of the past. I am only thinking of the multitudes who cannot travel that road and who will, and do, leave school rather than try it. The report of the Board of Education of Chicago for last year shows the membership by grades in round numbers as follows:

“ 1st Grade, 43,000	7th Grade, 14,000
2nd Grade, 36,000	8th Grade, 11,000
3rd Grade, 34,000	9th Grade, or 1st year in high school, 4,600
4th Grade, 28,000	10th Grade, 2,500
5th Grade, 27,000	11th Grade, 1,600
6th Grade, 20,000	12th Grade, 1,100”

It will be seen from this that there is a constant and deplorable dropping off from the first grade on. In the report for 1900-01, I note the following:

“ In 1889, 25,788 children entered the first grade.” The following per cents show the relative numbers of these that returned each year:

“ 2nd year, 90%	6th year, 48%	10th year, 9%
3rd year, 80%	7th year, 37%	11th year, 6%
4th year, 65%	8th year, 28%	12th year, 5%”
5th year, 61%	9th year, 15%	

The crowded condition of the so-called business colleges as well as that of our public manual training schools show a desire of a large number of people to obtain a different training from that which we offer

in the ordinary high school. Comparing the work done in the manual training schools and some of the recently established commercial schools with that of the ordinary high school we find a curriculum requiring as close application and as logical a sequence of study. At the same time that this new growth was taking place in commercial schools, our other high schools have grown faster than we could provide for them; for, in spite of the fact that 95 per cent of the pupils who entered the schools have left before graduation, our high schools have increased seventy-five per cent. (Report of the Superintendent of Schools, Chicago, 1901.)

While it is impossible to gather data that will show why the ninety-five per cent left the schools, it is not difficult to point out some of the causes upon which we can all agree. It is certainly a noble sentiment that places education above influence, power or wealth; but food, clothing, fuel and shelter are stern necessities. The struggle for mere existence is the all-important question for the majority of the common people. Is it a base, unworthy desire, on the part of school men, to teach struggling humanity how to make existence more tolerable. It was thought once to be a great achievement when two blades of grass were made to grow where but one grew before. We now find that two may be made to grow where *none* grew before. Not all poverty is due to "trusts," corporations or alcohol. A considerable part is due to ignorance of the most fundamental laws of economic and domestic science. Little girls in our schools taught to cook scientifically, to buy the most nourishing food, and to cut and sew their own clothing are saving many families from poverty. To my mind, there is no doubt that a considerable part of that ninety-five per cent entered the commercial world prematurely of stern necessity. Another portion lost interest long before they left school because the home and the school were too far apart—that is, out of harmony. Parents are absorbed in making a living, and see no help ahead from the schools; and the children receiving no encouragement at home, become imbued with the feeling that school will not help them do the work that beckons just ahead. The schools seem to them entirely impractical.

Can we not find a new field of interest for them that will furnish sufficient discipline, and lie so close to the every-day things of life that they shall continue to grow in it? Bookkeeping and stenography cannot claim this place. The great majority of those engaged in commercial life neither keep books nor answer letters. These branches are as foreign to their occupation as Latin and possess far less disciplinary power for those who can grasp it. The backbone of all commercial courses should be Commercial Geography. It is as yet ill defined and scatters over creation about as natural history did in the early days of science teaching. It must be differentiated into several branches before it can take high rank in the curriculum. It is a subject that

cannot fail to interest all who have any contact with business life. It gathers its data from every field of practical knowledge. It recognizes the part played by science and invention. It takes account of the influence of religion and established social customs in the world's common work. Possibly it should receive a new name, for the average parent thinks of it as geography and not commerce. Geographical Commerce would be an improvement in some respects. However, the name will take care of itself if the subject matter is living and growing as I believe it to be. Commercial geography is yet in the condition of the Liberal Arts Buildings at our World's Fairs. They contain too much under one roof to receive the careful attention they deserve. We shall have to divide the subjects into many divisions, such as the production of raw materials, influence of soil and climate, distribution, manufactures, labor saving machinery, mediums of exchange, banking, influence of railroads and waterways, the influence of religion and social customs on the production and exchange of products, etc.

All this will require a study of the leading modern languages, the whole field of science, and history—especially industrial history—political economy and plain English. We are making some progress along these lines in our city schools, but only a beginning. Most of the pupils wish to study bookkeeping and stenography the first year so as to take a position the next year. We insist on all pupils taking English one year. A year of foreign language and of mathematics with bookkeeping seems not unreasonable; so the stenography waits till the second year. Commercial geography is offered in the third year and political economy and commercial law in the fourth. In this way we hope to keep them at work the same length of time that we do others; but the allurements of a great commercial city are still against us.

Similar courses are being offered in the progressive high schools all over the country, and the time will soon come when the business world will more fully recognize their merits. This will also create more of a demand for the splendid courses offered here at the University of Illinois. The commercial or business world has long looked upon the universities and all teachers as the embodiment of the impractical. Our engineering and agricultural colleges have done much to redeem the rest of us from this bad reputation. Business men are beginning to recognize the practical value of the courses offered here in commercial lines. Let the high schools see to it that they do their part in advancing the interests of the same good cause.

DISCUSSION

PRINCIPAL F. D. THOMPSON
Galesburg High School

The paper states clearly the lines of work for the commercial course in a high school.

Experience in our high school has shown that the introduction of commercial studies has found favor with a large number of the patrons of the school.

Our work in English, history, arithmetic and civil government has been taken in the classes when these subjects were already taught. This has made it possible for us to carry on a commercial course simply by the introduction of a few special studies and having our other work presented in as practical a way as possible.

The plan of having these studies in the school alongside of the other work of the school has been appreciated by our pupils and has drawn many into the school. Many who have entered school for the sole purpose of taking the commercial lines of work have been brought to see the value of other lines of study and have taken them up. Those who have finished the commercial course alone have fitted themselves for places in the business world and have made themselves effective laborers in their chosen field.

PROFESSOR M. H. ROBINSON

The correlation of the commercial education offered by the university with that provided by the high schools involves the consideration of this important question, "What subjects in preparation for a business career and what kind of instruction are adapted to the intellectual development of the average pupil of high school age?" The character of the instruction and the nature of the subjects presented in the university naturally differ from those adapted to the high school course. Again, it is doubtless true that the character of the education and the nature of the subjects ought to be somewhat different during the high school period for the pupils whose school days end with the completion of the high school course and for those who are preparing for college. This difference has led to the establishment of distinct and separate high schools in certain cities for those who are preparing for the university. Still even in such cases the courses provided in the two classes of schools are more alike than different. The application of sound educational philosophy to the problem before us will probably necessitate agreement on the two following propositions: first, the larger part of the pupil's time in school up to the beginning of the college course is needed for the mastery of the intellectual tools which an educated man is constantly using.—the ability to read and understand his own and one or more foreign languages; a knowledge of the science of numbers and skill in their use; an elementary view of the natural sciences; second, there are certain subjects essential to a commercial education which are fitted by their nature to be a part of the high school curriculum. Such are commercial arithmetic, the nature of accounts and the elements of bookkeeping, commercial

geography and economic history. Each of these is based upon or is an extension of studies pursued during the high school course, and thus form the natural link between the high school and the college for those pupils who are shaping their high school and college courses in preparation for a business career.

DR. E. D. DURAND

What the high schools can give which will count for business will, of course, fit only for the lower ranks. This will serve to introduce the man into business, and then if he has the ability and initiative he can, of course, rise. But to attempt to give a man in the high school or in the college a knowledge of the way in which business is carried on, and especially of the conditions of any particular business which he may want to enter, seem very nearly, if not quite, impracticable. We can get it more in the college, perhaps, than in the high school, in the way of teaching the methods of organization and administration, the principles of business, the systems of banking and money, the organization of the different interests of a business and their relation to one another. All these will help the pupil. But so far as helping him to engage in manufacturing or any kind of actual business, we cannot go very far.

Now, if you teach a pupil the places and ways in which certain products are produced, the manner of exportation, and all that, what, after all, have you done to prepare him to go into the practical business of manufacturing? You cannot carry the instruction far enough to enable him to manage a particular business. There are a few businesses, of course, like the country cross-roads store, and a few others which are anomalous, and take no great amount of knowledge except of a general character. But for the most part, the business of today is extremely concrete, so that it does not seem to me that general instruction in commercial geography, for instance, will be of any particular service for that purpose. Not for a moment would I decry commercial geography as a matter of science; every pupil ought to know about the methods by which goods are produced, etc.; but for practical value to the man of business, there is considerable danger of overestimating it.

SUPERINTENDENT E. G. COOLEY
Chicago

I am inclined to believe that the trouble with the university man is the feeling on the part of the people of the high schools that they must in some way follow the lead of the universities, which are the most conservative part of the school system of the country. If we

would do less in this way and let the universities take care of themselves, we would have better commercial high schools.

The same proposition is here in the commercial line that we have in other studies in the high school, in science, history, Latin, etc., and that is a domination coming from the universities in which they inject university work into the high schools and expect the high school to do the work that is done by people in the university. What I mean is, that a person who teaches in a high school is expected to have attended a college or university. When he goes into the high school, he tries to do the same kind of work that he did in the university. This is one of the greatest troubles in the high schools.

There is, as you know, a very small number of pupils that ever go to the university. Hence, it is not fair to let the universities dominate the work of the high schools. Mr. Armstrong called attention to the small number who ever get into the high school. A still smaller number ever reach the university.

Another thing: we are dominated by the notion that thoroughness is absolutely out of any reasonable relation with the nature of the child. Now those who study the child will see that there is only a certain degree of thoroughness to be obtained. It is not reasonable to hold them back until they reach a certain standard; if you do you will waste the development, and it is not reasonable to hold them back to reach some ideal. They are growing and developing in their thinking and in their bodies. We see a little child in the primary room and we do not try to bring him down to the precise movements of the adult. We high school people, with a view to doing something for the young men and women who are going into business, should not be made mere instruments to explain analyses and all that, and keep them down. Of course we will teach them English, mathematics, history, and so on, but we should give them some broader ideas. They say it cannot be done because we cannot cover all lines. We cannot cover all lines even in technical high schools. We cannot keep the boys in order to graduate them in the Chicago high schools because they are so greatly in demand by the business men. They realize these boys have learned some things and they want them in their establishments. Now, we are finding the same thing in the commercial work; we cannot keep the boys through the four years.

PROFESSOR G. M. FISK
University of Illinois

The criticism of Superintendent Cooley regarding the conservatism of the university, while applicable to American colleges and universities in part, hardly applies to our higher institutions of learning at the present time; at least it does not apply to our state universities.

Present university entrance requirements offer great latitude in the selection of preparatory studies. What the universities want are young men and young women equipped to do university work. Of course, there must be some general standards of entrance, but the particular subjects taught in high schools are of less concern to university authorities than the character of the preparation. Most of the universities are glad to give high school students credit for all advanced work done in the secondary school, provided its quality justifies it. This applies not only to language or mathematics, but to commercial geography or any other subject. More specifically as to business education it is not for the universities to say what commercial branches should be taught in the secondary schools. These must be selected by the latter in such a way as to meet local requirements. The universities simply say, "We will accept and give credit for all commercial branches taught in the universities and duplicated in the high schools."

SUPERINTENDENT CLENDENEN: How many students in the University of Illinois are taking the business course?

PROFESSOR FISK: I presume there are at least one hundred students in the University who are taking substantially all the subjects in one of the business courses. On the other hand, there are approximately a thousand students who are taking one or more subjects in these courses.

SUPERINTENDENT T. C. CLENDENEN
Cairo, Illinois

I have come to the conclusion, based on the observation of many years, that less than one-half per cent. of the whole number who enter high school ever enter the university. I believe, as Mr. Hewett says, that we must face our courses in the high school toward the school life. The number of these boys and girls who are going into a university is too small to make us face our courses toward the university. We must face our courses toward the people. Any correlation, from the standpoint of superintendents, between the work of elementary schools and the work of the high schools has no influence whatever with us. We want our boys and girls to come to the university feeling that it has a business course to offer and that they want to take it. I have a boy taking this course and I think the university will give him what he wants. He does this without any shaping of his high school course towards the university. The high school course, when it is in proper working order, will not face towards the University of Illinois or of Chicago or any other, but will face towards the lives of the people after they leave the high school.

PROFESSOR D. E. BURCHELL
University of Wisconsin

One point has come into my mind which I would like to mention. What will be the result if the high schools emphasize today the idea that they are simply preparing young men to leave the high school for the business world? Will it not have a tendency to lead young men to think that the high school does all that it necessary to get them into business, and so they see no advantage in going further?

On the other side, the university people should realize that these are the men they want, and should try to get hold of them. They should say to the young men, "You are going into business; cannot you make same way to enter the university and add to what you already have a university education and be a better man therefor and get farther up with more rapid strides than you can by leaving the high school now and turning into business?"

PROFESSOR M. B. HAMMOND
Ohio State University

What are the universities to do with the men who have no idea when they begin these courses that they will go on? Fifty per cent. have no idea of taking a college course at first, but after taking the course in high school they decide that they would like to go on in the university, but are not able to meet the university requirements without going back one or two years in the high school course, unless the university will accept the work offered. Should the university accept commercial subjects and put them on the elective list? The university ought to settle that question.

PRINCIPAL J. E. ARMSTRONG
Chicago

There are several points here. We cannot think of such a thing as planning any course with the hope that it is going to last ten or twelve years. We must also leave out of consideration that we are preparing for college. We have the ninety-five per cent. to deal with before we come to the college question at all. Of course the better the course, the better for those who are going to college. Now we talk about a commercial school preparing a man to go into the iron business, for instance; but here we are referring to the trade schools. When we use the word business we are still referring to commerce and not to any particular line of manufacturing. The time is coming when we shall have these trade schools. We are becoming more and more a manufacturing nation and we shall have to give more attention to these things. We need also to give attention to commerce, transpor-

tation, etc., and that is the subject we are considering when we are talking about commercial schools. The University of Illinois gives credit for anything that has been well done in any high school and will examine the school. I have no sympathy with the idea that we should confine ourselves to elementary things; that we should merely do more thoroughly the elementary things.

The high school teachers were complaining because the child came to them and could not spell, and that simply called attention to the fact that the high schools were at fault. The ninety-five per cent. are the ones that must be considered, and we must consider the fact that present lines do not meet the needs of these and that there are other lines of training that would. So any effort to reach this ninety-five per cent. is bound to remain in the secondary schools and we are going have the courses to do it.

MR. G. W. BROWN
Brown's Business Colleges

I think it is true that the universities are conservative, and I do not see how they can be otherwise. I do not believe that the high schools are to adopt any course of study until they have the strong support of the people. Let the universities make the course that has been outlined here today. Let them make that course general and show that there is a point to it, that those that follow that course are led to important positions, and my judgment is that it will not lack persons to take it. It is not feasible to arrange a high school so as to make it preparatory.

THIRD SESSION

HOW SHALL WE TEACH BUSINESS PRACTICE?

By PROFESSOR D. E. BURCHELL
University of Wisconsin

The term business practice has several meanings according to the connection in which it is used. In the business colleges for the past fifty years it has applied to that department known as the offices. The work in the offices was pursued by the student at the end of the course, and it was here that he was taught to put in practice the theoretical work which had preceded. These offices represent wholesale houses, commission houses, insurance and real estate offices, banks, etc. The idea being to give the student practice in office routine and so far as possible accustom him to the atmosphere and habits of business practice. This practice has not extended much outside of bookkeeping processes. In the stenographic department similar practice has been given in correspondence, quite as good as that in the offices, although not given the name of business practice. In the commercial department of high schools the term business practice has come to mean the same as in the business colleges and to a large extent the same meaning applies to the courses in business practice being introduced into the colleges and universities. However, to the business man, the term business practice has not such a limited meaning, but extends rather to all phases of daily business activity. I shall discuss this broader meaning later.

The business colleges for more than fifty years have been training young men and women for clerical positions, and they, too, have been the principal means of instructing in stenography and typewriting. Hundreds and sometimes thousands have been sent out from the business colleges annually to take positions in the offices of business houses. While many have never risen above mere clerkships, others have used this small beginning as a stepping-stone to something better. Many of the most prominent men in the country date their start in life to the day they left the business college. A couple of years ago a sign on 125th Street, New York, read something like this,—“Roosevelt knows a good thing, his private secretary, Mr. Cortelyou learned stenography in this college.” I suppose if you were to pass there today the sign would read,—“We make cabinet officers, Cortelyou began his career with us.” Other business colleges might make similar statements because, until recently, they have been the only means by which a young man or woman could get a start in the business world without beginning at the bottom. If we were to have a

list of men who have attended business colleges it would surprise us to find among them so many prominent and successful men. All credit is not to be given to the courses in business practice, but it is in this particular department that the greatest competition has arisen and wherein the most prosperous business colleges have excelled. It is this phase of the course that they have emphasized most in their advertisements and printed matter, claiming in this particular to give young men and women "actual business practice."

It has been an open criticism for years that while such courses in business practice are good as far as they go, they are much too narrow, and train only for clerical duties. It is for this reason that we should not follow the definition of business practice as outlined by the business colleges, but rather should undertake to grasp the business man's meaning and extend it to all phases of business activity. In other words, courses in business practice should not only include practice in bookkeeping, correspondence, commercial papers, and business forms, but they should also include the science and art of funding operations, buying, advertising, selling, credits, collections, cost accounting, auditing, systematizing, organization, management, etc. To a certain extent these titles are considered in courses in economics and private law, but in each case there is a phase that is peculiar to business administration and can only be treated from that standpoint, which is the standpoint of the business man and not that of the economist or lawyer. The emphasis is on the art not so much the science or law. To the educator it may seem mercenary, but the business man is not in business for his health any more than the teacher, preacher, or lawyer. And the teaching of good principles and practice in business should lead to wholesome results by training young men for honorable business careers to be in the van of progress, and the backbone of the nation.

The business colleges devote about eight hours a day for ten weeks to business practice. This gives a total of nearly five hundred hours, which in University time is about two hours a week, with preparation for three years. But, as has been shown, the business colleges do not include more than a quarter to a third of the courses that should be taught. In other words, the larger course we have suggested would run throughout a four years' course, five hours a week, with preparation. It is impossible to thus give one-third of a college course to business practice. This time must be cut down either by eliminating the suggested courses or working on a different plan. We should not omit any of the titles suggested, for, in general, they are coördinate. This necessitates introducing plans and methods which provide instruction in the various subjects, and within reasonable limits.

A second limitation to be mentioned is the complete lack of books suitable for college texts. Texts are not needed in the advanced

courses, but are a necessity in the large classes of the first two or two and a half years. The books on bookkeeping, etc., are made for the business colleges and high schools, and are too long drawn out for college work. The books on other subjects in the business series now being issued by several publishing houses are written for high schools and popular reading and in general are not suitable for work of university grade. The results are that the instructors in business practice have to spend too much valuable time cutting, splicing, and modifying to suit the conditions. The methods of teaching which I shall consider in a moment will doubtless work most instructors to death, but will enable the few who survive to get out some books suitable for college texts in business practice.

The third and last limitation which I shall consider is that of equipment. At present it is quite impossible to secure room and furniture to equip a department of business practice similar to business offices and where the various duties could be experienced by a large body of students. In progressive universities there is a constant clamor for floor space and furniture to accommodate the increase in students and instructional force. With office accommodations for upwards of two hundreds of students, as is the case in the courses in business practice at Wisconsin, it is easy to imagine the magnitude of the problem. As much care should be exercised in installing a laboratory for business practice as for physics, chemistry, or engineering. It is not only the question of furniture, but also of office equipment in general, such as adding machines, loose-leaf ledger systems, card systems, filing systems, various forms and bindings, copying devices, etc. It is as important for a business man to know the possibilities and comparative merits of "bill and charge" machines, as for an engineer to know the workings of a dynamo. Neither may have occasion to operate the respective machines, but the knowledge of them is essential for general purposes, and it is simply this all-round knowledge that makes the college man better than he who simply learned his duties as one learns a trade. He may not be as skilled an artisan at the start, but he will excel the artisan in managerial ability. They may not be as good machinists or bookkeepers, but will make better superintendents, secretaries, or business managers.

As to just how business practice should be taught, and even as to just what subjects should be considered, is a matter of opinion. The organizing of this course is only in its infancy and a great many plans must be tried before a settled method can be agreed upon. For some time to come the arrangement of the work will be governed largely by the training and experience of the man in charge. That of the man having only a college training must differ from that of the man who has added business experience. The difference will not be so much the quality, as the influence brought to bear upon the material,

method, and subjects emphasized. The outline I shall suggest presently bears upon the subject matter rather than the specific title to be given to the several divisions. There are many phases of business practice which are important, yet in the crowded arrangement cannot have separate titles and must come under some larger title and at such a time as best suits the general plan. Then, too, the order is a secondary matter, for most of the subjects are coördinate and independent. The whole matter must be left to the discretion of the instructors and made to fit the general scheme of college electives, etc.

First, let us consider business forms and commercial paper. I believe these should be mastered before beginning bookkeeping. The principle and practice of bookkeeping should not be halted at every turn by introducing new business forms and commercial paper. Let these be understood and put in practice. Procure a supply of a large variety of forms from business houses or have a supply printed. Show the various correct ways for filling these forms. Acquaint the student with the transactions in which the variations are used, discuss the significance of the variations, their uses and results. Then give the student typical transactions, asking them to prepare forms and commercial papers to suit the transaction. This work can be extended more than one might think at a glance, for instance, bills, invoices, statements, receipted bills, vouchers, voucher checks, simple forms of sales books, cash books, ledgers, various forms of notes, drafts, checks, acceptances, stock certificates, transfers, bonds, wills, deeds, time sheets, pay rolls, freight receipts, bills of lading, documented bills, etc., etc. In the meantime the student is getting familiar with the nature and meaning of many business transactions he never heard of before, and the interest can be kept at a good pitch by discussions and lectures touched here and there by legal points, many of which should not be omitted simply because a course in commercial law is to follow. If the latter is taught by the "case method" it will be much more profitable to the student and satisfactory to the instructor if the student has a general groundwork in law closely associated with related business transactions. When this general study of business relations and transactions is in hand, the principles of bookkeeping may be represented. Emphasis should be placed upon analysis and thorough drill in journalizing. A student should be able to analyze all ordinary transactions before beginning bookkeeping practice. This will save time and avoid the necessity of drawing out the bookkeeping, as has been customary, by spending so much time on theoretical work that is of no practical use. The elementary sets may be cut out entirely if the preceding work is done well, and, after a couple of lectures on the fundamental purposes and uses of the books, special ruling, etc., students may begin immediately on a difficult set and do it well. This work should be typical and practical

and accompanied by lectures. Instead of bookkeeping practice being a lot of dry mechanical work it should be supplemented by a complete yet economical course on the transactions and managements of the business it represents. With so much else to be done, the work in bookkeeping should be soon supplemented with accounting problems which bring into play bookkeeping of a large variety with a minimum of attention given to the mechanical work. Emphasis should be put on such topics as cost accounting, statements, balance sheets, voucher records, new form of books, such as self-balancing ledgers, with their controlling accounts, etc. Much practice should be given in opening and closing, realization and liquidation, transfers of ownership, changing from partnerships to corporations, etc. The material for these topics should not be theoretical and elementary exercises usually given in bookkeeping texts, but rather should be some of those given in English books on advanced accounting, those given in the C. P. A. examinations of the various states, or, still better, taken from actual business. These topics are very interesting, and although they represent some knotty problems, yet the students like them and feel great satisfaction when one has been solved. These problems should be from various lines of business, such as retailing, commission, wholesale, real estate, insurance, transportation, manufacturing, banking institutions, etc., etc. Each business gives an opportunity for a general discussion of its nature and characteristics and affords great opportunities for acquainting the students with the particulars of its administration. Of the various lines of business studied, banking and manufacturing should be emphasized because they give the greatest variety of business relations with a minimum of repetition and bring under consideration most of the transactions common to other lines. This is not only true of accounting, but of other phases of administration. The work in accounting, which I have outlined, should not occupy the student's whole time until finished, but as is convenient. Other phases of administration should be considered early in the course to allow the accounting to mature in the students' minds, and, too, much of the work is very complex and should be left until the senior year. Fortunately a great deal of material on accounting may be found in books. It is only necessary to resort to business concerns for current transactions and modern practice. This will be brought out later.

Business practice in correspondence presents some knotty problems due to the deficient preparation of the student in English composition and penmanship. Possibly it is not so much the lack of preparation as it is the subsequent neglect and abuse. So few of the students carry the practice of English outside the class room and have no interest in the subject beyond the required courses; the teacher of business is therefore obliged to teach composition as well as commercial

practice. Then, too, the penmanship is usually still worse, and the student has to labor so to write legibly that it diffuses his efforts and prevents the best results in form and composition. The limited time for business practice will not permit teaching penmanship. It is a habit of long standing and cannot be modified in a few weeks. Furthermore, between the meetings for penmanship practice the student scribbles off several lectures and offsets all the good that can be done. No, penmanship is not in our province, let him get it elsewhere, and if he cannot learn, set him at the typewriter. He can soon typewrite well enough to satisfy the requirements for practice in correspondence, then let us hope he will soon rise to a managerial position where he may have stenographers, and thus bridge his several deficiencies in technique. It, however, remains for the instructor to teach him the style and characteristics of effectual business correspondence. When one considers the magnitude of business done by correspondence, and how such little things promote or defeat the correspondent's interests, too great care cannot be exercised in teaching our young men what constitutes good correspondence. It is a means of buying goods, selling goods, collecting accounts, making contracts. Letters must carry personality, tact, persuasion, etc. They must put force upon some points, and delicately avoid others. If one could only know the results of a slight change in some of his letters and realize how it would change success to failure or vice versa, greater care would be given to develop skill in correspondence. The teaching of the subject also has its problem. Letterwriting usually practiced in the public schools is inadequate. It affords but little opportunity for developing the essentials. At first, of course, the student must study good form and expression, which can be done by reproducing good copies. In this connection I should use good letters secured from business concerns. Lectures and discussions may accomplish much, but the heart of the course must be personal instruction. Sweeping criticisms in class do not benefit the individual. You must discuss each man's work personally. Some have great possibilities which should be developed, while others must be drawn out inch by inch, and then get only meagre results. When this is well under way extensive practice should be given in actual correspondence. The instructor should simply give the purpose of the letter together with the essential facts, and leave the student to shape the letter. Every letter should be criticised and discussed in every detail. This takes much time, but it pays. I might suggest that the work in teaching correspondence can be very much reduced by using graphophones. Not only will they lessen the work, but afford possibilities which cannot be accomplished otherwise. For instance, the instructor cannot have each student with him when he is criticising his work, but with the graphophone he can rapidly dictate the criticism in detail one after another at

his will, and the student may hear the criticism with his letter before him and without taking his instructor's time. If he does not get the full meaning the first time, he has only to repeat the record until he does. There are a lot of other economies of this sort. The graphophone has its limitations, and we have all heard it squawk some favorite air until we shivered, yet if it has a commercial value we should not allow prejudice to debar it.

The art of buying, advertising, and selling goods, should receive due consideration. The major part must be given to advertising and sales, but the art of buying must not be rejected, for the proverb that "Goods well bought are half sold" is as true today as ever. It is not so much the act of buying as it is to know what to buy, where to buy, and when to buy. This course is preceded by economic geography, where natural products are traced from the place of production to home markets. In business practice these markets are compared as to prices and location. Partially manufactured goods are traced in the same manner. Prices and values at convenient distributing points are compared with those of industrial centers. The rise and fall of prices are studied and principles underlying "buying close" or "contracting ahead" are considered. This touches familiar fields in economics, yet, as stated before, deals with the art of buying rather than the economics of prices.

Advertising and sales are studied together. In fact, they cannot be separated in business. Several books on advertising have appeared recently and help the cause somewhat, but an undergraduate course in this subject is not to make ad-writers. The purpose is rather to lead students to an appreciation of its uses and abuses, its powers and limitations, to familiarize them with its history and modern practice, and to lead them to better understand its possibilities and how it has come to serve a great purpose in selling products to the whole world at a minimum of expense. Advertising has its drawbacks, but it has been a great factor in developing modern industry. As stated above, there are enough books on the subject to supply an undergraduate course, but if the subject is to be presented at its best, inductive work must be done.

Specimens of all kinds of advertising for the past twenty to fifty years can be used to advantage with special emphasis on those of the past decade. This brings out not only valuable study of the subject in hand, but also a fund of information on industrial developments. It gives the student great range of view together with a keener sense of the essential of good advertising and the principles which underly its effect on the minds of prospective purchasers. Much of the material can be clipped from old magazines stored in the attics of nearly every home, and running back indefinitely. Bound magazines, of course, are useless, but in most libraries there are large files of unbound

magazines and papers. While these cannot be mutilated, they may be used for illustrative purposes. For general study of bill boards, photographs must be used, and for street car advertising, one must go direct to the advertisers or be satisfied with a current collection. This all takes time, but is no greater task than has been undertaken with success by educators in other lines. For "follow up" advertising it is only necessary to have your business friends save the mass they receive in the course of a year, and you will have ample material for several courses. These afford excellent opportunity for analysis and comparison of some of the best advertising; they are planned and executed with great care. In many cases they fail because founded on unsound principles of psychology and human nature. This the students should discover.

What is true of advertising is generally true of selling goods. The two activities are working to the same end, viz., to create a demand for our goods and dispose of the same at a profit. One can no longer sell goods by appealing to sympathy, nor can the salesman increase the business naturally by tenacity or perseverance, if his product is without merit. Good goods, moderate prices, and a responsible house are essentials for permanent sales. While we must admit that there are many lines of business not based upon sound principles, it is our purpose to show their abuses and shortcomings, compare their utility and character with stable concerns, and then dwell at length upon how stable and respectable concerns market their product. There are almost unlimited possibilities of production, but success, after all, depends largely upon ability to sell at a profit. In this connection students should be given much practice in correspondence. To be able to buy and sell to advantage by correspondence is an art, and in many lines is an economy, and, as you all know, there are hundreds of large concerns which do business in no other way.

To sell goods is one thing, to get your pay is another. Very little business is "spot cash." Most domestic sales are on credit of from seven days to four months. But to sell a bill of goods on credit to be paid for on a certain day does not assure you that at that time the cash will be laid on your cashier's desk. In most cases unless you take the initiative it will never reach you. Nearly everyone who buys on credit lets it run just as long as possible. He does not pay the bill until he receives from one to a dozen requests, and sometimes waits for a lawsuit or mechanic's lien. People are anxious enough to buy goods, but not so willing to pay for them, and, furthermore, resent a request no matter how courteous or long deferred. These conditions make collecting an art. Again the skilled correspondent is at a premium. It should be much cheaper to do out-of-town collecting by correspondence. The adroit and tactful credit man accomplishes much by this means. The student should become

familiar with the general principles and terms of credit and the essential legal points in the various states. Several books are coming out on Credits and Collections, but the instructor in collecting material should make a good collection of practical information from credit men, together with form letters and copies of personal letters of striking quality. Students appreciate this, and the influences of some clever phrases of good letters remain with them indefinitely.

The economists are making a thorough study of credit, and have been for years. It is the backbone of our commercial, industrial, and financial activities. Credit and collections are one side of the question, and funding operations are the other. The latter resolve themselves into two distinct groups, viz., commercial or short-time credit, and long-time credit. As the profits of a bank are largely the profits on the deposits of its customers, so the profits of mercantile and industrial concerns may be the profits of operating on borrowed capital. If the profits on the business are greater than the rate of interest, it is usually a good business policy to increase the output by borrowing within reasonable limits. When to borrow, and how to borrow, is no less a phase of business administration than other activities, and falls under the head of business practice. First, there must be a good understanding of funding institutions, viz: banks, trust companies, insurance companies, etc. This brings out the general practice of these institutions in connection with funding operations, and, knowing this, the student can appreciate the significance of various methods of procuring funds, together with their possibilities and limitations. The art of when to borrow and how to borrow can be discussed in this connection. Here again, must be added a liberal amount of current information. The instructor must consult or correspond with business men in various lines of business and learn from them what is being done. The essential work in teaching business is to discover and teach the current practice. While all must be grounded on principles and history, greatest stress must be put upon the practice of the present. So far, we have considered the subjects of business forms, commercial paper, bookkeeping, accounting, correspondence, buying, advertising, selling, credits, collections, and funding operations. There remain at least four more titles for consideration, viz: organization, system, auditing, and management. Each considers all that has preceded.

Organization and system run parallel and coincide at many points. There are several books and magazines along this line which help a great deal, but the instructor must depend upon general investigation for most of his material and matter. Extended correspondence with business men who are interested in educational matters is of great help, but there are so few who are willing to devote valuable time to such matters that it takes a great deal of effort to get a small amount

of material. However, the only way to get it is by studying modern concerns. One can get much help from the advertising matter of various systems and devices. Professional accountants are often quite willing to take you over one or more of the plants they have organized. This helps, and in time a good course may be given. Along with this should be a careful study of the various office systems, filing cabinets, time saving devices, etc. Familiarity with their comparative uses and values is essential if one is to understand the greatest possibilities and economies. It is just as important to know when devices are unnecessary as when to install them. Out of the general mass of equipment offered for sale the instructor must glean the important material and present it in such a way that students will get general principles rather than details. It is quite impossible to discuss at length the organization and system of various lines of business. Advanced work should be left for special elective courses, permitting students to select those lines in which they have special interest. In this connection I believe much can be accomplished if the instructor is willing to work up a small clientele and do more or less work in organizing and systematizing for going concerns and permitting the students to help as much as lies in their power. I believe there are great possibilities in this direction which will prove of exceptional value in getting the student accustomed to the atmosphere and acquainted with the details of modern practice in large business concerns. It is not time yet to estimate the outcome, but I believe that in a few years this suggestion will be carried into operation, and that this particular phase of the courses in business practice will accomplish quite remarkable results. As I have stated, it embodies all that has preceded, and affords opportunity for application of all knowledge that has accumulated to the student's credit.

Auditing must be taught much the same way as accounting, plus the work in organization and system. The general principles and many of the details may be studied from books, which at present are mostly from authors who are English accountants. Some practice may be given if the plan suggested for application in work systematizing is adopted, but, after all, auditing is so devoted to details that it had better be given as an advanced course in the list of electives and given enough independent time to make the men proficient in the subject. When studying organization and system the subject of auditing is constantly under consideration and a great deal about auditing is taught indirectly.

It is not necessary to say much about the study of management. If all that has preceded has been worked to a single plan and purpose, the details of the various activities have received due consideration, and it is hardly necessary to do more than discuss them from the standpoint of the management and formulate general principles. To

summarize and show the various activities as they occur in various lines of business is all that can be expected on the subject of management at the end of so general a course. As has already been stated, the best we can expect is to consider the fundamental principles, and enough details to fix the work, and sufficient application to acquaint the student with modern business practice. More than this cannot be done in a general undergraduate course. If more is to be taught on any of the subjects, elective courses in advertising, accounting, and auditing, organization and management, etc., should be provided. Or another good arrangement is to give courses in business administration for special lines of business, viz: Banking and Finance, Transportation, Manufacturing Industries, etc. Such matters will shape themselves when a good general course is provided. The planning and necessary details alone will occupy the time of the few men in the work for some time to come. Each, independently, will work out many problems, and later the best may be remoulded into one general plan embodying the best of all others. There is no reason why the courses in business practice should not do credit to any institution. They do not violate educational ideals any more than other utilitarian courses, such as applied courses in mathematics, chemistry, physics, geology, mineralogy, conversational courses in German, French, Spanish, and English courses for newspaper writing, etc. If the motives are right, business practice is worthy of the best educational forces; and let us hope that the field will be rapidly recruited with men who are not only prepared to do the work, but men who are deeply interested in education, holding to high ideals for general good rather than the special interest, and who are willing to persevere in a calling that is bound to elevate the character and standard of the commercial and industrial world.

DISCUSSION

MR. G. W. BROWN
President and Manager of Brown's Business Colleges

I cannot help wondering what Father Bartlett would have thought, the man who fifty-odd years ago attempted the first commercial school in this country, if he could have heard this paper. He said he had finished his apprenticeship when he was twenty-one, and desired to know more of bookkeeping. He looked about and found no school in which it was taught. He inquired of business men and was told that it could not be taught in a business school, but must be taught in the office. Looking about, he could find no office where he could learn it. He said, "Well, this is a strange occupation, where you cannot get in without knowing how and cannot know how without getting in." He told me he made a resolution then to spend his life in attempting

to make good that loss to young men. He did it, and has lived to see the students in business colleges number hundreds of thousands.

But I am asked to criticize the paper. It is almost too good to be believed that this kind of a course can be carried out in the State University. If I should pass criticism at all I should say it seems to involve such a multitude of detail that I should not think there could be room for the other branches which should make part of the university course.

I believe that the time will come in this country when some such a course as has been sketched today will be very popular in the universities, a time when it will come to be understood that a multitude of J. P. Morgans are needed to transact the business of this country. There is a feature of business which has not caused much attention. I refer to the consular service in which skilled young Americans will be needed, who are able to speak the language of the people to whom they go, and who will be well versed in the history, geography and economic conditions of the country to which they are accredited. When it becomes apparent that such young men are necessary, they will be forthcoming, and the university will have its opportunity to prepare the facilities to carry the work on.

My thinking along these lines has been on a very narrow plane. We have seen the problems, we have realized the necessity of a broader course, but in our line, our limitations are such that such a course is beyond the reach of the private commercial school; and yet, I have no recollection in all my commercial school work of about forty years of the time when the pressure is as great upon us as now. There seems to be no end, absolutely no end, to the desire for this education.

If the gentleman can carry out this program he will certainly secure great results, and I am not afraid of the popularity of the course. If the time shall come when the universities and colleges and high schools are better able to do this work than any other agency now devised, I shall thank God for it; and I as an instructor in private schools will be able to step down and out, knowing the work will be better done. You will find in your universities in a couple of years that the greatest demand you will have on your hands will be the solving of this great commercial question.

WHAT BUSINESS MEN WANT YOUNG MEN TO KNOW

MR. DAVID R. FORGAN
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The subject which has been assigned to me raises a simple business-like question which I shall try to answer in a brief, business-like way. Before attempting to answer it specifically, however, let me say that I rejoice that the day seems to be dawning when specialization in edu-

cation is to be the rule—when the man who is to manufacture soap is to have a different training from the man who is to make sermons, and the one who is to follow finance is no longer to be required to pass an examination in philology.

Commercial life is different from professional life, and, therefore, commercial education should differ from professional education.

The question is still asked whether a young man entering business life is helped or handicapped by a university course. Even so wise a man as Mr. Carnegie thinks he is better without it. If any one here is inclined to that opinion I would recommend a perusal of a published address by Prof. J. Scott Clark of the Northwestern University, which I think will convince you that it pays to go to college. Neither professor nor pupil, however, must imagine that a college course can make a business man. Some so-called business colleges profess to do so, and that is their weakness. A graduate of a business college told me when he had finished the course in banking that he felt sure he could run a bank, but I soon found he could not even balance a pass-book. Only experience, hard, trying and disappointing experience, can make a business man. But just as the university can put the student through a course of study which, with experience added, will produce an able lawyer or skillful physician, so I believe that it can supply the foundations upon which a successful business career may be built. Such a career will involve industry, faithfulness to duty, the welcoming instead of shirking of responsibility; it will require self-reliance, judgment of men, the capacity of seeing things as they are, and not as they are represented; it will call for courage, faith and far-sightedness; above all, it will demand truth, square dealing, and integrity of character. All that will tend to implant such principles and foster such attributes of character may safely be included in a commercial education. Specifically, the things a young man ought to know as a result of his educational course are the things which will best help him in his work and lead to his rapid promotion. They are neither numerous nor difficult to learn; but judging from my experience in employing men, they are very rare qualifications in this country.

What are they?

First: To know how to write a good legible hand, to make good figures, and to place them correctly—the units below the units, the tens below the tens, and so on.

Second: To know how to add, subtract or multiply figures after they have been correctly taken down, and to do it rapidly, and with perfect accuracy; and

Third: To know how to express yourself clearly, briefly, and grammatically in a letter, and how to spell the words correctly.

A few years ago I was taking three young fellows of about eighteen years of age into business. They had all graduated from the high

school. As a test I gave each of them forty old checks and instructed them to take down the amount of each check, and then add the column to ascertain the total. After they had labored with this gigantic task for half an hour I went over to see how they were doing, and found them all terribly busy and unwilling to submit the result of their labors to my inspection. I gave them more time. Returning later, I found them still anxiously checking and re-checking their work, and I took their examination papers from them. They had all done the job several times, but not one of the three had taken down the figures correctly, and not one of them had correctly added the figures they had taken down. The task was beyond their powers. They explained to me that they had had no arithmetic for the past five years and were a little "rusty" on it. I remember that word "rusty." It struck me forcibly at the time. They informed me if I would try them on mythology, they could pass, but I told them I had no use for myths in the banking business.

Now, I left school when I was fifteen, and any one of the boys in the upper half of my class could have taken down the amounts of 400 checks in less time and added them without a mistake. Moreover, if anyone had called off the amounts of forty checks about as fast as I am reading this sentence, any one of us could have given the correct total without putting down a single figure. But that was in Scotland!

Let me tell you another actual experience: In my office we keep a file of the letters of application received from boys, and when we want a boy we select the most promising letter and look up the author. Some years ago our head clerk informed me that we wanted a boy. I told him to select the best six letters from the file and bring them to me. Not one of the six letters was perfect in spelling, or beyond criticism in grammatical construction. In the matter of penmanship I need not tell any business man, nor any college professor who has examination papers to look over, that our schools turn out the poorest writers to be found anywhere in the civilized world. I do not see how it could be otherwise so long as children are taught to write with the penholder sticking up perpendicularly in their fists instead of being held lightly by the fingers with the end of the penholder pointing to the shoulder.

I have not given this subject careful thought or wide investigation, and I may be all wrong; but speaking as a business man of some experience, and as a father of a family, I charge the public schools of this country with attempting to teach so many subjects that the things which I consider essential and fundamental to a business education are not being so thoroughly drilled into the boys as their importance demands. The simple accomplishments which I have mentioned are the essential tools with which business men want boys to be provided when they begin a commercial career.

If a boy is to achieve great success, however, there is another instrument which he will need—a well-trained mind. That is what a university course should give him. A mind trained to concentrated study, to careful analysis of the subject in hand, and to be content with nothing short of the complete mastery of it, is the best equipment for business life a young man can possess. You cannot teach the technical knowledge of any particular business, and to my mind it does not matter so much what subjects you place in your commercial curriculum.

The general culture of an educated gentleman is not wasted on a business man. Naturally, however, the course should lean towards subjects of practical value, such as geography, bookkeeping, general banking methods, exchange and clearing house systems, note circulation, negotiable instruments, and the uses and abuses of credit. Political economy, commercial law, the history of American railroads, and the wonderful development of our natural resources which is continually going on—all these will help the storing and training of a mind fitted for success in business life. To be a fine penman, an accurate accountant, and a good correspondent is practically all that a young man needs to begin with. But if he is nothing more his career is apt to start off brilliantly and then stop short of real success. He may become a good lieutenant, but if he is to develop into a general, or a field marshal, or a Marshall Field, he must add to natural capacity a breadth of mind which is most likely to be attained by a liberal education.

In closing let me say that there is one thing business men want young men to know, which is more important than all else, namely, that integrity of character is, after all, the greatest power in the business world.

In these days of graft and exaggerated reports of graft, it sometimes seems as if all business were crooked, and all men dishonest. Such a conclusion, however, would be hasty and unwarranted. The revelations of moral obliquity on the part of men in high positions do not prove that the great solid middle classes are dishonest. They only prove that, no matter how rich or influential a thief may be, his sin will surely find him out. The moral sense of the great majority still revolts at dishonesty, and the great mass of business is still transacted on a perfectly straight basis—the basis of simple honesty. Think for a moment of the place and potency of credit in the modern business world. The life-blood of modern commerce is not gold—it is credit. Over ninety percent of all business transactions involve credit. Without credit modern business would simply collapse. Credit starts enterprises, builds railroads, manufactures goods, moves merchandise, wages wars, sustains nations, makes civilization. Now if all this be true, if the whole system of modern business is built upon credit, then credit

itself must rest upon a firm foundation, or the entire structure would crumble to ruin. That foundation is character. Credit, derived from "*credo*," implies faith. Every transaction accomplished by credit is based upon confidence in the integrity of someone. Thus character is the very foundation of modern business, and ultimate success on any other basis is almost an impossibility.

A course in commercial education should, therefore, include moral teaching. The best business men in the community stand for much more than the mere accumulation of wealth. Although devoted mainly to making money a business man's life need not be sordid. He, too, may have his ideals, his friendships, his philanthropies, his yearning after the higher and more excellent things of life.

"The grace of friendship, mind and heart
 Linked with their fellow heart and mind;
 The gains of science, gift of art,
 The sense of oneness with our kind,
 The thirst to know and understand,
 A large and liberal discontent—
 These are the gifts in life's rich hand,
 The things that are more excellent."

DISCUSSION

MR. E. L. SCOTT

General Manager of Sears, Roebuck and Co., Chicago

In giving consideration to young men who are possibilities as future executives, I have made it a practice to study them from four view-points, in the following order: character, health, ability, knowledge.

You will note that knowledge is the last named. Hence, in discussing what I, as a business man, want young men to know, were I to assume that this subject contemplates only the practical knowledge of business affairs, I would be held to the last of the four essentials which make a well-rounded business man, and would thus fall short of my present opportunity.

Very frequently a little knowledge is a dangerous thing, and it is sometimes hard for the young man who has splashed an oar in a little inland lake to realize that this does not make him capable of commanding an ocean liner.

This must not be thought to imply that I have not full faith in the possibilities of young men securing an advanced knowledge of business affairs. On the contrary, thoughtful and far-seeing business men will welcome an intelligent development of commercial education. That the thinking educators are today wide awake to the commercial demands of the country, is in keeping with the age which requires preparedness just as much for the shop as for the office.

I would take the subject in its broadest sense. When I demand of young men that they possess knowledge, I contemplate three phases, viz: Knowledge of one's self, knowledge of other people, knowledge of one's business.

Leaving these three sub-divisions of knowledge for a moment, I would pass to the four prime essentials for commercial manhood. These are character, health, ability, practical knowledge.

If the college gives us young men crammed with practical knowledge and seriously lacking in other essentials, or totally lacking in some of the important sub-divisions of these essentials, they are unworthy and not wanted.

In order that the fullest force of this statement may be felt, I quote an inventory sheet which I use to take stock of executives in our house:

1. **CHARACTER:** Morality, temperance, industry, capacity for work, ambition, loyalty, faith, obedience, judgment, self-control, sympathy, courtesy, cheerfulness, patience, perseverance, courage, enthusiasm, will power, thoroughness, regularity, concentration, tact.

2. **HEALTH.**

3. **ABILITY:** Initiative, organization, administration, instruction, discipline, business economics, productiveness.

4. **KNOWLEDGE:** A. *Merchandise*—Manufacture, value, salability, advertising, operation or use. B. People, correspondence, house system, department routine, school education.

The first essential, character, is a requirement so obvious that the discussion of its possession seems unnecessary; but the ordinary understanding of character is narrowed down to a measure of the man so far as his honesty and morality are concerned. These, however, are only two of very many view-points.

In knowing one's self, one must be fully aware of the degree to which one possesses all these specific qualities; and in demanding that a man shall know himself, we presuppose that he will be honest in his study of himself, and when he actually knows himself, he will have a correct measure of the factors which make the well-balanced business man.

The reason men fail in their undertakings is not nearly so often to be attributed to their lack of knowledge as to a lack of some of the essential qualities. For instance, many men possess ambition to a marked degree; are persevering as much as would be desired; are filled with courage and enthusiasm, but are absolutely lacking in judgment; have never learned the laws of obedience, or are positively lacking in concentration. These men fail, and wonder at their failures; and others wonder at the failure of a man possessing many brilliant qualities.

Figuring the qualities that make up character as perfect at one hundred per cent., I would rather a thousand times that our young

men should come to us possessing every characteristic I have named, and none to a degree of over fifty per cent., than that they should come with many qualities at nearly one hundred per cent. and totally lacking in one or more of the most important. You can multiply *something*—small as it may be,—but you may multiply nothing a thousand times and still have nothing. What can you expect of a man who totally lacks ambition? What will become of a man who possesses not one iota of industry? What can a man accomplish who has absolutely no concentration? And I want to say that after watching many failures and some marked successes, the former occurred through a great lacking in some of the qualities of mind and soul that make character, and the successes were directly traceable to the possession, to a greater or less degree, of all these same qualities. And *more*, the successes were greater or less in proportion to the approximation toward perfection in *all* the phases of character.

It is the possession of *this* knowledge, the knowledge of self, that the young men of today need. No other knowledge so fully portends the possibilities of power. Character shortcomings mean lamentably weak spots in that armor which the commercial warrior must wear if he would have the slightest assurance of being a captain of industry. It is not enough that a man should be sufficiently enlightened to admit the propriety of being industrious or loyal or obedient or courteous or courageous or thorough or patient. It is not enough that when questioned as to whether he should possess thoroughness or will power or regular habits, he would admit the wisdom of such possession. He must lay the measuring stick of perfection in all soul and mind qualities along the fabric of his own character, and be honest when he measures. If there is any time when a man should be cool and calculating in judgment, it must be when he is learning himself. The searchlight of truth must be turned on the soul of the man, and woe be to him who closes his eyes to his own weakness. The business world is full of failures whose own distorted vision has magnified good qualities and totally failed to disclose shortcomings.

The Gospel of Hard Work—persistent, effective work—must be taught. One of the most discouraging phases of the college situation today is that the young men have forgotten or never learned the habits of industry. Why this is true is not for me to say. The statement is not a theory, but a fact, and is not based on impressions of a few or the testimony of another, but on a fairly close personal contact with some hundred and fifty college men who have entered our institution as the best to be selected from four times that number. In my opinion, the college attitude toward hard work has got to change very materially before you will turn out acceptable candidates for other than menial positions in big business houses.

In the commercial world, work—*hard, intelligent work—counts*,

and counts big. True, back of work must be brains for work to count most and be most effective; but hard work with little brain power will yield successfully up to the limit of one's capacity. On the other hand, brains with little work is like scattering fertilizer with no seed sown—the natural result is little more than a tremendous lot of weeds.

I know that the college authorities are alive to *the necessity* of industry. I also know that the average college man does *not* know the principles of hard labor. It is, perhaps, a hard thing to say, but until *some* of the horse-play and society and cheap imitations of real athletics and criminal waste of time are eliminated from the unwritten college curriculum, the college will *not* send out embryo business men who will develop beyond the embryo stage. The time is ripe for the brainy college ornament to realize that the college grind is attending strictly to *his business* in taking advantage of the opportunity made possible by some one's hard earned dollars. He is attending to *his business* in preparing himself for the great unknown business world. The jolly good fellow who is only that will find a mighty small field for the exercise of his peculiar talents, for the shell game is *passé* and circus barkers are in small demand and only get a six-months' job each year.

The prime essential that business men want young men to know, therefore, is the habit of industry. There is no excellence without great labor, and since knowledge does not consist alone in the mere admission of a moral truth but is only real in its practice, then industry must be taught, not as a precept that is merely accepted as right, but as a principle that must become a *constant habit*.

I might go on and talk of the other essentials that make a well-rounded character. Anyone will admit that all of these are perfectly proper acquirements and that their absence is harmful. The whole truth lies in the fact that college faculties allow young men to sleep through their college course and never waken to the fact that Loyalty and Faith and Obedience must be *cultivated*. Young men are permitted to sustain an attitude of hostility toward their instructors that cannot fail to grow into a serious detriment to them when they go into the business world. They do not learn the necessity for loyal obedience to their superiors, who are really their instructors in business affairs. While it is true that periodical gradings serve to attach some importance to the college work, the college does not make it a business to positively require perseverance, thoroughness and concentration. The cultivation of these qualities, therefore, is accidental rather than otherwise.

When the college man shall have lived up to his opportunity in acquiring that mental training which study can give,—when he learns unquestioning obedience to righteous authority; when he makes it his business to cultivate all the mind and soul qualities that make up

character; then, and not until then, will the supplementary education in practical knowledge be worth while.

In following up the study of self, the second great essential is Health. A great many young men have good health accidentally and have never given much thought to the fact that the healthy man, as compared with the unhealthy one, stands infinitely better show in the strenuous business life. In this day and age of the world, especially when the seeker after business knowledge is a young man, he is expected to be able to give the best he has in him to the affairs in which he is engaged. Regularity of habit is promoted by health, and of the very many qualities that go to make up character, regularity is one of the essentials. He who has not a sound body cannot be sure of so sound a mind as perfect health would have assured. In the battle for commercial supremacy, every man needs a full battery of mentality to bring to bear on commercial situations. Therefore, the college which promotes commercial education must, by all means, teach to its students the care of the health. It is a poor recommendation for a well balanced, thoughtful, capable young man to come to a business institution dyspeptic and anæmic.

I am not so interested in discussing at this time the third essential, wherein one should know one's self, namely, ability; except in one phase, and that is whether or not the college professor gives as full attention as he should to the adaptability of the student to the commercial life. Has the young man knowledge of his ability in its commercial aspect so that he may be sure that his choice of labor is wise? Let me repeat my dissection of Ability as applied to the commercial world: Initiative, organization, administration, instruction, discipline, business economics, productiveness.

We find men coming to us who have never learned the value of a dollar. How can they understand business economics? How can the qualities of ability, initiative, organization and administration come to him who shows none of them in student life? What amount of productiveness can you expect from a young man in business whose college life was one of lazy indifference?

What the business men want is well cultivated land. Plow it deep and turn up the soil of personal responsibility. Level it with the harrow of unceasing toil. Fertilize it with the richness of loyalty and obedience, judgment and thoroughness. Plant it with the first seeds of practical knowledge and the keen, broad business world will cultivate and nurture such a crop of commercial giants as the world has never yet seen.

HON. W. B. MCKINLEY

As an active business man I cannot fail to express my appreciation of the papers given this evening by business men, and especially the

emphasis given to character. I cannot help thinking there is an opinion among young men that those who have that quality of mind they call "smartness" will succeed, but I do not think they will. I think that industry combined with honesty will win and that "smartness" will not.

THE ETHICS OF BUSINESS

RIGHT REVEREND EDWARD WILLIAM OSBORNE, D.D.
Bishop Coadjutor of Springfield, Illinois

Honor all Men! Love the Brotherhood! Great words are these, lying at the very root of social life, being a keynote for all relations of man with his fellows. We may take them as the fine keynote of Business ethics. For what do we mean by the word? Ethics is defined as the science of human duty, the science of right character and conduct.

Ethics teaches us of the nature of moral agents, fostering intelligence, free will, and conscience. It bears also upon virtue, upon right in conduct, action and aims.

It is not possible to conceive of moral life without honor; nor can there be any idea of obligation that is centered in self or antagonism; it must carry with it fellowship, love. Any other thought of obligation might only lead us back to barbarism. Ethics thus governing all the relations of man to man has as its foundation, "Honor all men! Love the Brotherhood!"

But business does not lie outside the realm of ethics. For what is business? Shall we be wrong if we define it as a form of social service in which man serves his fellow man and in doing so receives some gain or profit to himself? He supplies the needs of others and is in turn supplied himself. We must never lose sight of the mutual character of every business action, no matter what may be the detail of the trade or industry.

Let us think a little farther on this. What is the real underlying idea of every kind of business or trade? Is it not the supply of the wants of the community? Incidentally the supplier receives a profit, but business was not and is not established and carried on for this. Were there no wants to be supplied there could be no business as we understand the term; the measure of the wants is the measure of the prosperity of him who supplies them, or what we call profitable business. The supplier is therefore the servant of the public whose wants he ministers to. There is no discounting in saying this. For if he be willing to serve he also lays under obligation those who are served by him. If, however, courtesy and civility are required on the part of the seller, they are equally to be looked for in the buyer; the obligation is a mutual one.

This aspect of business as a form of social service seems to be in some degree recognized in the restraints put upon it and also by the privileges accorded to it. In some countries no man can transact any business without a license from his fellows through the constituted authority. While we have no such strict rule in this state, yet the number of businesses for which a license is required is very great. This social service is under many restrictions.

Or think of the privileges. The railroads for instance. The grants of land and subsidies allowed them, the power of taking land necessary for the roads without the consent of the owner who would rather retain the land than receive compensation. What do these things indicate? Surely that the directors and corporations of the railroads are carrying on a great public service. These privileges are most certainly not granted solely that certain persons may obtain profit to themselves by transporting the people hither and thither. It is a public service.

The business man, therefore, of whatever grade, stands before us as a public servant, bearing, by reason of that character, a responsibility to the public, and, may we say it here, to the Supreme Being to whom both the business man and the public belong.

Business ethics must then stand for the science of human duty, of right conduct in actions and in aims, reaching out after the supreme good, exemplified in that form of social service which consists in the lawful interchange of that which either possesses, in such way that both are mutually benefited.

As we say this it may be that we almost hear a voice that seems to whisper, "Honor all Men! Love the Brotherhood!" While this is true and honor and love should be the governing forces in business transactions, so that the divine idea of social help may be developed and seen, it is equally true that it is too little realized. It is realized to some extent, perhaps mostly in small matters, which have an aspect of individual dealing of one with another. Our hearts fill up with indignation at the absence of honor and love in some act of petty tyranny.

Who is not indignant at such tales as these? A woman's husband is killed on the railway. The widow desires to earn her living by keeping an eating house for the section men at a certain junction. At the end of a year she is alive and that is all: she is in utter poverty. She might have been well off, but the foreman makes it a condition of her having the custom of the men that she shall buy all of him, he doubling the price of everything for his own profit. A girl in a candy store knows that the scales are false and every customer is cheated by her hand. She remonstrates only to call forth abuse and threats. She must either violate her conscience daily or go and seek other work which, for such as she, would be hard to get.

How do we feel with regard to a man who, keeping a small bakery, makes his help come at seven on Sundays as on weekdays, though no Sunday customer has ever been known before eight; who keeps the same help until eleven o'clock, when he pays their weekly wage, refusing to give it on any other day or at any other time, "Sunday on time or none at all," and does it with the avowed intention of keeping them from Sunday morning rest and worship.

Have we forgotten the cry of indignation that went up from the poor throughout the land when in the midst of a great coal strike a mighty corporation raised the price of oil a cent a gallon without any other motive than greed?

On the other hand there is a feeling of admiration for the woman who, having been dishonest with her scales in her little country store repents herself and turning the scales around gives extra weight to every customer during as long a period as she had been fraudulent. Or that other woman, who having bought her stock of coal for a country business when prices were low refused to raise her own price when the strike came. She sold as long as her stock lasted to her poorer neighbors for no more than she charged before the strike began.

Things such as these make us note failure and make us fully conscious that in transactions between man and man the law ought to be as this one, "Honor all Men! Love the Brotherhood!" In other words, "Love thy neighbor as thyself."

There are few, if any, who would deny this in such matters as we have noted, but when it comes to larger matters, when the business seems not of individuals dealing directly with one another, but of corporations, societies, syndicates, then questions are at once raised. Is the same law to hold good here? Are the same foundations to be looked for in corporations that you demand in individual character? Are the same ethical laws to prevail? Are there to be the same standards of life and business in corporation dealings as in a country store where honest people deal as much for the pleasure of it as for the supply of their needs? And the answer, we are told, is *no*. We are told it sometimes in words, angrily as if we were wrong in suggesting such a thing; sometimes with contempt as if we were fools not to know that it would not be possible for men to live and partake of the life of the corporations if they were required to maintain these standards. *The responsibility* is altogether different. The very largeness of the transactions makes a difference. Corporate acts are on a different plane. Corporations as such have no conscience, no souls, and nothing more is to be asked of the individuals composing the corporation than can be asked of the corporation itself. The individuals sink their individuality in the corporation, they are bound by the acts of others, they have not freedom of action and therefore they have no responsibility. It may be doubted if this view is really sincerely held,

but it is undoubtedly acted upon. And with what result? "Commerce and manufactures have pressed on their way with very small thought of the individual, have seemed dead to all sight and feeling, and modern industrial conditions have conspired to destroy all manhood and even efface individuality." Such books as Wyckoff's "The Workers," afford startling illustrations of this. Slavery has passed but slavery still continues, and the very methods of labor are such as to make a man a slave to a machine even if not to a hard task-master.

In years gone by One said by the voice of a prophet, "I will make a man more precious than the gold of Ophir." In the days of the Gospel when we might surely look for the fulfilment we find the prophecy forgotten, denied. Rather we find that modern civilization and business seem at times near to receiving the curse of Babylon and for the same reason. Note the summing up of the charge against her: "The merchandise of gold and silver and precious stones, and of pearls and fine linen and purple and silk and scarlet, vessels of most precious woods, and of brass and iron and marble, of cinnamon and odorus, of fine flour and wheat, and beasts and horses and chariots and slaves, and souls of Men." Her merchants were the great ones of the earth. Her judgment came. She has passed forever.

Notice the result of the conditions of which we have spoken: trade unions, strikes, violence, arising largely from want of consideration of the individual; the general attitude of hatred towards capital on the part of labor on the one side; on the other the revelation of the corruption and dishonesty of the members of the corporations, themselves, names that were high in the world, in business, even in the church, being levelled to the dirt until the world is asking, "Who will be the next?"

In the whole world of business there seems to be a confusion and perplexity as to the possibility of the application of moral principles to the conduct of any kind of business. Men cannot live apart from business. Is it possible to keep morality in business and not destroy your chances of success? The whole commercial atmosphere is tainted. Honor, love, brotherhood, manhood itself, all seem passing away. Must these things be so? Must we accept such a state of things as being hopelessly beyond remedy? Possibly if it were universal we should be compelled to do so. But it is not universal. There are men, and corporations also, and men within corporations, who have neither laid aside nor forgotten the higher standard of business life. Permit an incident of personal experience: Some years ago, preaching in one of the great churches of London, England, I took occasion to speak of the responsibility of men for others' sins, for spreading temptation and moral infection. Among other matters I spoke of the great circulating libraries of England and that they must

be held responsible for the books they put in the hands of the people, and that the responsibility rested on the members of the firms or companies. After service a gentleman much agitated wished to speak to me. He was a partner in one of the largest firms in England carrying on both the publishing and library business. My words had touched him in certain matters where his conscience had refused to be still. We talked long and the next day I received an invitation to lunch with the members of the firm. The four high-minded and honorable men I met were most courteous and withal almost pathetically eager that I should know what their standards were. It was to me almost a revelation to learn the care with which they endeavored to keep their shelves clean from evil books and the methods they adopted. For instance, for society to know that they had rejected a book would be at once to advertise it and increase its sale. It was better to put perhaps half a dozen on the shelves instead of a hundred or more. They could then truthfully say the books were always out, and so the circulation was practically destroyed without attracting attention. Many books, periodicals and papers they did entirely refuse to handle, and so in a difficult business recognized responsibility and kept their consciences clear. And there are many such in every line of business. It is not every man who is ruled by gold, or holds himself bound by the maxims of others whose consciences have, alas, been drugged.

It follows surely that if some can maintain the highest standards of business ethics we can ask, we have a right to ask it of all. Why should it be a matter of surprise if we find men high-minded and upholding their own life and business principles? It ought not to be. How, then, shall we make the demand for a return of the first principles of honor and love? There are those who trust in the law and the number of these seems increasing. Perhaps no laws have of recent years been so numerous as those relating to morality and honesty. Laws on the ballot or public officials, protection from corporations, or from the exactions and neglects of employees, on disputes between capital and labor, on protection for trusts and charities, and such like have multiplied. While on the one hand these laws and the necessity for them shows a terrible corruption, on the other the demand for them shows a growing sense of public morality, a demand for an ethical standard. But we must not expect too much from the law. The state itself is made up of individuals. The best laws have to be administered by individuals, and many an almost perfect law has been utterly defeated in its action by a corrupt officer. It has also been well said, "The law should never be allowed to stand for the maximum of a man's moral obligations toward himself or toward his fellowmen." (Sir Edward Fry.) The penal code should not take the place of the moral law.

There is a better way. The state has its responsibilities to discharge and it does this by the making of laws. But the appeal is not to the law alone. It is to the highest and best that is in each individual man. Wherever corporate action touches the lives, the health, and the mental or money loss or gain of men and women every individual member of the corporation must be brought to feel that he is a steward, a servant, accountable to men, and behind that accountable to Divine Law, or to God. We must reach the individual and show him that on him all depends. His courage and his example are to tell. It is for him to reach out after self restraint, restraint of avarice, restraint of the desire of power. The personality of each must be addressed, must be brought out. Every man must be led to see that he cannot sink his own personality in a corporation in any way such as to lose his responsibility. Every one of his words and acts wherever said or done bears the stamp of his own personality, and cannot be outdone or denied. We need to bring into the soul of every man in business on a scale large or small the spirit of Brutus—

"I had rather coin my heart, and drop my blood for drachmas,
than to wring

From the hard hand of peasants their vile trash
By any indirection."

This is the task set before those, who taking up the study of business ethics, desire to lift up a true standard. It is nothing less than to lead men to accept as their rule, the Golden Rule, the watch-word, "Honor all Men! Love the Brotherhood!" Herein comes the place of education. Von Humboldt has said: "Whatever we wish to introduce into the life of the nation must first be introduced into the schools." The universities set the ideals for schools, let us begin there. There is the field in which to teach the principles and to train in practice; a training place for a complete manhood. There is great need of teaching. It is the duty of men to know and to understand the questions at issue. They are not easy to understand nor are they capable of ready and simple answer. They must be studied and disentangled with far more care than the finest skein of tangled silk. They cannot be treated as some coarse cord, a push here and a pull there and the knot is gone. The higher education. Is it not the highest to learn the questions that separate men and bring injustice, dishonor, sorrow; to learn to bring men together; to learn so as to be able to teach and set forth the highest standard of human duty, and to encourage those striving to attain them?

Has not the Church a place here? Is it not for her to penetrate civil life with the Divine Spirit, to transform the worldly by bringing near the Divine, to regenerate human character by the light of God and to restore the whole social fabric by bringing in, as it were, a new

soul? The University and the Church must go hand in hand in the work of this higher education.

It has been well said that capital and labor need a third word and that is "management." Both are dependent on management, and management is business. Good management is good business. But what do we mean by good management? Hard work, clever plans, stirring men to the greatest amount of work, keeping our expenses to the lowest. Does this differ much from slave driving? It would cut out the moral element. The result would be dollars, but neither honor or love. Good business, good management, is something else than this.

Management is Brain, neither money nor physical labor. It is brain that uses, combines, manages both. Our work is to train the brain, to send out men whose brains shall be trained and moved not by money, not by expediency, but by moral force, and directed by conscience, by the science of human duty illuminated by the Divine Spirit. This is the standard set forth in the life of Jesus Christ, the Incarnate God, the workman of Nazareth. This life would bring good business indeed.

Are these things possible? Is there any hope? Turn for a moment to other spheres of life and action. A judge of the supreme court of the United States has recently said that during thirty-six years on the bench no one directly or indirectly, by word or letter, or in any other way ever proposed, suggested or intimated that any decision he might be called on to make would be for his benefit pecuniarily, politically, socially or otherwise. May we not learn from this something of the esteem in which his own character was held? Recall the elections of President Roosevelt, and of Governor Folk in our neighboring state of Missouri, and see if it is not true that in spite of the tremendous evils around there is a growing sensitiveness to considerations of honesty and honor. Did not the heart of the nation respond to the words of our late Secretary of State when he said. "The application of the Golden Rule should be the essence of American diplomacy in its dealings with other nations?"

There is hope, but be it ever remembered that all depends upon the individuals of whom the State is composed, and especially upon those individuals entrusted with political power. For this the State needs her best sons to serve with intelligence and self-sacrifice. She looks to her universities to supply them. Men who, bringing business ethics to bear on all their relations with their fellowmen, will show the result of individual work in an elevated State. They are to come from our colleges and universities for here there is not only teaching of principles, but also the opportunity of application of principles to life. Here it is possible in practical ways to reach out after and in a measure attain the highest possible standards, from the intercourse

with fellow students, from the daily contact with the faculty and the relation that springs from it, from the business relations to members of the fraternity, from the responsibilities of the fraternity house, from perfect honesty in dealing with lodging-house keepers, stores and shops, from absolute faithfulness in study, and from perfect honesty in matters belonging to examinations. For the development of a law-abiding consciousness, what opportunities all these give for the practice of business ethics, of exemplifying the Science of human duty. It is for the University to teach and according to its opportunity enforce, and for the student to adopt this life. The student has then by self-control, by self-sacrifice, with patience and Divine help, the highest standards of the student's nature.

The student who has been so taught and has so lived goes out a man prepared to face evil. He will not be so shocked by it as to become incapable of action. He will not be overthrown, nor lose his faith in all men, nor in God; but he will be ready, armed with knowledge and with argument, but still more with his own personal character, to meet the shock and maintain his life with a conscience blameless in the sight of God and man.

He will be able to take his place in social life, in business, it may be in politics. He will be able to work about by himself in mine or on mountain top with theodolite and measuring chain, or to take his place in great corporations and sit at the board of directors. Wherever he is he will be a power for righteousness, his word will be received, dishonor will shrink before him, and men shall recognize him as they once did Daniel, as "a man in whom was the spirit of the holy gods," a man who can be neither bought nor frightened. In his time and by his relations with men the State shall be lifted up and the result will remain. It will not make his quiet happiness and joy less if he remembers that he followed the principle, "Honor all Men! Love the Brotherhood!" in the class rooms and applied them in his social life, in the University of the State of Illinois.

FOURTH SESSION

COMMERCIAL MUSEUMS IN RELATION TO UNIVERSITY COURSES

PROFESSOR WILLIAM PATTERSON

University of Iowa

"If you wish to succeed in the commercial world do not go to college, but plunge at once into business," is the sum total of recent advice given young men by a noted business man. This gentleman who contributes so largely of his abundant means for the welfare of his fellowmen should not be dismissed without consideration. The statement that he is mistaken or is an old fogey may suit the impulse of the moment, but is not an answer. Moreover, Mr. Carnegie is not alone in his conviction. He represents a type of stern business men who today are prominent in the industrial affairs of the country. Such men have no ax to grind. The schools are in no way their competitors. The college or university to them is a business proposition. It is a manufacturing establishment that offers to them its product and asserts that its use will advance their output and increase their profits. Moreover, to continue the figure, after a fair test has been made the reply is not only a refusal but carries with it the statement that even the material is rendered less capable by its efforts.

When we consider that the majority of the college students must not alone live in the business world but make a living in it, the criticism, if true, becomes a most serious charge. Personally I am inclined to believe that Mr. Carnegie is in a large measure justified in his contention. His college or university is of an earlier period. Culture was then the end in view and discipline the most important by-product. Education was for education's sake. It bore the same relation to the problem of daily bread that east does to the west—comes up to but never overlapped. It is perhaps unnecessary to discuss here the business value of earlier college courses. That they were of value is beyond question; that they are still worth the taking is also true. The fact of a conference upon commercial education, however, indicates a belief that they might have been more valuable.

But what of the present university? Even if it be considered, I am not surprised at the gentleman's criticism. The young man of today may spend four years in a university and come out as ignorant of the conditions he is to meet in business tomorrow as the sweet girl graduate. Neither is it necessary for this to be the case for him to pursue classical courses to the exclusion of all else. Grant him work in political economy, finance, banking, sociology; aye, commercial

geography, commerce and statistics. Courses such as these is the reply of the university of today to the business man's criticism. The question is, are they adequate?

Discipline obtained by a study of the classics is good. The same obtained through reasoning upon economic topics is better. The study of the economic man is without doubt worthy the time and money of the student. Marginal utility may be a determining factor, but the best of us will have difficulty in applying it to the everyday bargain and sale. Whether the end of labor is to avoid pain or obtain pleasure is a peaceable topic for an evening's discussion, but the man who is to stand at the world's cross-roads and levy toll needs something more and needs it more than he needs the other. First of all he needs an intimate knowledge of the objects of barter, their source and quality. All this theory is the last thing needed in the business world. Only in imagination is he a captain of industry when he gets his diploma. His first years have to do with business at the bottom. Checks, receipts, notes, bills, drafts, raw products, adulterants, by-products, etc., are his portion for a time and in nine cases out of ten that time is until death.

The work of the university for its liberal arts students should be to do for them what schools of engineering, dentistry, medicine and law do for their matriculants; fit them for the work they expect to undertake. Theory is all right, but it is not enough. The engineer spends time upon theory, but the actual work is dominant. The dentist sorts out the various tissues of the foot that he may the better pull a tooth, but a large part of his time is spent at the chair. That worthy character of Dickens' who was accustomed to impress the significance of a word upon his pupils by having them perform certain manual labor, as washing windows, was not so far wrong.

The field of the college and the university on the liberal arts side is the great business world outside of the professions. Of this, the pupils as they come from the public schools know practically nothing. The real business world is associated with "papa at the store," but what rules govern or how it all acts is an abstraction. Their ignorance relative to the common things about them is monumental. The corn, the wheat and the oats are products, but where they come from, what is made of them is wholly unknown. To state that maple sugar, strawberry jam and strained honey are very largely products of corn would brand the informant as an ignoramus. That starch, or sugar, or oil could come from such a source is little less credulous. The angora goat to them is a scavenger and has no relation to the plush that covers the seats of our railway coaches or the dress their best girl wears to the party. Mercerized cotton may be either silk or brilliantine and they are not the wiser. In short, the elementary facts of production are not theirs. In this condition they get economic man

and marginal utility for a diet and the theory of social forces for leisure for four years and then enter the office of a business man. Is it strange that he describes the fellow with the diploma as a fool and expresses it with a dash before it? This busy business man is forced to explain things that are as elementary to him as life and breath, and he is naturally disgusted with what he has received as a finished product that is not at all and frequently has on an outside veneer that is extremely difficult to penetrate.

The relation of a commercial museum to the university courses grows out of this condition. It is one of the chief means by which the student may be introduced to business forms and given an idea of the products of several countries, their production and manufacture. Here may be gathered together the several kinds of checks, bills, notes, bonds, mortgages; in short, specimens of all forms of commercial paper, and these forms endorsed, stamped, checked and mutilated as returned after their course in actual business. With these in hand, courses in banking, corporation, finance and accounting may be brought down to earth. The student will receive intimation of some of the methods, short-cuts, and, may I say, tricks of business. Tax receipts, assessor's books, railway, telegraph and telephone reports to the taxing body, will make clear many points in the method of taxing that a mere description, no matter how lucid, would leave in an uncertain state. Samples of bills of lading, rate schedules, reports of superintendents, conductors, section bosses and other railway officials, will do much to put the subject of transportation on an everyday basis. The theory of rates will work out in practice, or rather, it won't.

In commercial geography we are told that outside of the great corn area of the United States, corn is raised in Egypt, New South Wales and Mexico. If now samples of this product from each of the named countries are at hand, it may at once appear that the corn of Mexico is an entirely different product from that of the other countries. Place Egyptian cotton beside the Sea Island or upland products of the United States and the student will understand why one sells for ten cents more than the other. In like manner the relative merits of products produced in different parts of the world may be compared in fact instead of by description. State to a class that the chief products of Ceylon are spices, oils, and graphite, and the statement could almost be repeated for Venezuela. But show the products of the two countries and the excellence of the spice and the medicinal side of Venezuela's production is seen.

Take for consideration the subject of cotton. There is an added interest created when the webbing from the stock is shown, the various classes of cotton goods, not commented upon alone but given the student for examination. Again, it is known that products are now

important because of their by-products. He is a wise man who can tell the ancestor of the article before him. To bring in olive oil, gold dust, blue cloud, fairy and half a dozen other soaps with samples of cotton goods and declare them all of one mother is stimulating to the pupil and knowledge of real worth. But add to this the steps in the manufacture of these products and you have brought the factory to the class room or taken the student on a tour of inspection.

In like manner any raw product may be demonstrated. On every hand we hear of the adulteration of food, but what the adulterants are or how food so treated appears is no part of general knowledge. Adulterants are easily obtained and foods so treated are in every show window. If assembled they give as good an insight into one form of business effort as can be provided.

Enough has been said to indicate the relation of the commercial museum to university courses. I believe it to be at least a partial answer to the criticism of Mr. Carnegie and others. It provides the practical and gives concrete information upon subjects in which description needs fail. Every descriptive course requires its exhibits and by it alone can the intricate knowledge of products and processes required for success in the commercial world be obtained. It familiarizes the workman with his tools; gives form and substance to principles and theories, and, last but not least, lends interest to courses that although fundamental are difficult to present.

The various products grouped by countries, supplemented by views showing method of culture, the means of marketing and life of the producer, will give an idea of the economic status of the place in question. This supplemented by statistical charts and diagrams will indicate the position in world affairs the country has occupied or now maintains. If the emphasis of the course is on the world markets or the commercial status of the several nations, this is perhaps the best grouping.

If the products themselves are to be studied, all exhibits should be grouped around given classes or families. In my own work this has been the plan in view. Take for illustration wheat in cereal group. So far as possible I have arranged the samples of wheat from the several countries according to the importance of the country in the production of this particular product. This is because an attempt is being made to consider commercial geography from the standpoint of importance of the countries in the world's market. A secondary grouping is provided showing different varieties of wheat and these again arranged so far as possible according to the importance of the varieties presented. Finally the by-products are grouped and as many processes in their manufacture shown as possible. By this means the student of a given industry obtains an idea of the sources of supply and their relative importance, of the methods of manufacture

and the ultimate products of the industry. In presenting the processes of manufacture no attempt is made to be technical, but the fundamental changes occurring in the transformation of product are presented. This is the most difficult side, for me at least, to show. It is in many cases impossible to hold a product in a given stage. Take for example malt used in the production of liquor. The process of fermentation cannot well be arrested at a given point. But in the majority of cases the final by-products may be held for presentation.

It is not to be regretted, however, that more of these stages of production cannot be shown. The danger of the commercial museum is that of mere acquisition. Anyone who has witnessed the grand rush of the populace for souvenirs, stamps, postal cards, etc., or competed with fellow museum men for the spoils of some great exhibit, knows the overweening desire we all have for everything whether it can be grouped and used in our work or not. The university museum should be a working tool, not necessarily a place of recreation or one for the presentation of novelties. These are well in their way, but frequently are so in the way as to obscure the purpose of the effort. I have been told that the range of the commercial museum was unlimited, and when I have asked my informant what new lines of effort he would suggest the reply has almost invariably been the collection of freaks in the commercial world, or the presentation of primitive Egyptian or other methods of production. The range of the commercial museum is unlimited in the abstract, but the range of a particular museum is distinctly circumscribed. Personally I desire all commercial products, their by-products, means of manufacture, marketing and all that, but it would be an absolute waste of university money to get it. The cost of many of these are far beyond their utility, and there is so much that is of highest utility and at our very door that it is not wisdom to seek them at present. The aim of the particular museum should be to provide illustrative material for the particular courses offered at a particular place. The production of the state should be fully represented, that of the United States may be less minutely shown. A typical state of a given section may be exploited for the whole, but whatever is done must be done well. An exhibition of forage crops, or fibers or cereals should be complete, either for the locality or the group. It is no effort to accumulate: any child can do that and many of our accumulations are childish. But to make a complete exhibit requires time, patience, money, and above all brains. I have no sympathy with the mad grab that is so often witnessed. The collector must determine his basis of classification and work to it. The danger is of getting too much rather than not enough: of seeking foreign products to the exclusion of home; of becoming a museum instead of a working laboratory.

DISCUSSION

DR. W. H. SCHOFF

Secretary Philadelphia Commercial Museums

Of the development of a commercial museum in its relation to the group of museums under the control of our organization in Philadelphia it is not necessary for me to speak here, but the extension of the work so as to include a sphere of usefulness in university and preparatory school instruction is of decided importance at the present time. In a general way efforts have been made to establish this work at a number of our leading universities in connection with the courses in economics and commerce, notably the Universities of Pennsylvania, Wisconsin, Iowa and your own University of Illinois, and I have no doubt that the same subject is under consideration or is being actually worked upon in a number of other universities. With this movement we are in hearty accord and are anxious to do all in our power to further it.

Our own attention has been much more generally called to the need of placing collections of commercial material in the public high schools and grammar schools where courses in geography are regularly given and where a more or less consistent tendency is now observed to infuse into such courses an element of commercial knowledge and training. We have been actively engaged in this work in the State of Pennsylvania for the past four or five years, and I think it can safely be said to have passed its experimental stage. When we began to call attention to the need of such collections in the public schools it could truthfully be said that almost no schools in the state had made any effort in that direction, with the notable exception of the Boys' Commercial High School in Philadelphia.

Two years ago at a session of the State Legislature the suggestion was made by some of the leaders interested in educational matters that an appropriation should be made to us to continue and enlarge the distribution of these school collections or miniature museums, and a bill appropriating \$25,000 for that purpose was adopted without our having made any request or appeal for it. This fund enabled us to enlarge the collection in many directions, so that it now includes over one hundred original photographs of large size, many maps and charts showing the distribution of staple products, and an extensive series of specimens illustrating the production, shipment and various stages of preparation of almost every standard article of consumption entering into our daily life. We have gone ahead with this work, and now have about eight hundred collections distributed among high schools and grammar schools in every county in the state, and the work was so well appreciated that at the last session of the Legislature the appropriation was continued for the next two years, by which time most of the important schools will have been supplied.

We have found an unexpected degree of interest in these object collections in schools of the lower grade, and are now working out a plan for a less extensive collection which might meet the need of secondary or even primary schools. Our purpose has been not so much to send out a collection complete in all possible details as to provide a working nucleus which will give the local school authorities an idea of what can be done to stimulate an effort in every locality to build up a school museum suited to its own needs. One of our collections, amplified in many directions so as to make it possible for more advanced work, has been presented to the Commerce Department of the University of Illinois and is now in use by your students under Prof. Fisk.

In Pennsylvania we have yet to find an instance where the presentation of one of these school museums has not resulted in a greatly increased interest in commercial education and a stimulus to the school authorities to continue and extend the work, and I feel that the same results could be expected in any state where the same effort should be made. It is a work which could be carried on to great advantage in Illinois or in any of the states where the state university plays so prominent a part in shaping the course of instruction in the public schools and where there is so widespread and progressive an interest in the general subject of commercial education.

PROFESSOR H. S. PERSON
Dartmouth College

I think commercial museums are of educational value for secondary work, but are of doubtful value for university work. If they have any value for university work, it would be for a mere elementary course rather than for the advanced work.

COMMERCIAL ORGANIZATION

By PROFESSOR J. S. HAGERTY
Ohio State University

I shall take the privilege to limit the discussion of commercial organization to mercantile institutions. Even so restricted the scope of the subject is very broad for a thirty minutes' paper. However, I shall attempt to consider the subject, although briefly, from three points of view: 1. The evolution of mercantile institutions in the United States; 2. The internal or administrative organization of these institutions, and, 3. The scientific data afforded by them, and the opportunities for presenting this data in our higher commercial institutions.

The Evolution of Mercantile Institutions.—In discussing the evo-

lution of mercantile institutions only the leading factors can be touched upon. It will be the aim of the paper to show how some inevitable forces were at work which preordained our present mercantile mechanism.

In Adam Smith's time the producer found a market simply for his surplus products. Producing purely for profit, with the expectation of procuring a market for the entire output, is a nineteenth century idea. Even in the first half of the nineteenth century, when totality of production is considered, this aim in production had made but little headway. A century ago the fields of business enterprise were greatly restricted and the operations within those fields were necessarily slow. We had no railroads and canals, no telegraph or telephone systems in 1800, and the methods of communication by mail were very slow and awkward. If the factory, which was not thoroughly established in England until 1830, had been in existence then, its output would have been limited to a local market.

So long as people produced largely for personal consumption and sold only surplus products, no elaborate distributive machinery was necessary. The factory was a specialized institution with facilities for supplying a certain class of wants for a large number of customers. Better means of transportation by canal and railroad came with it, and shortly afterward better facilities for communication by telegraph and an improved mail service appeared, and these forces broadened the scope of markets and made the selling of goods complicated phenomena.

The manufactures made possible by our exclusive policy prior to the war of 1812, and sustained by the tariff of 1816 and succeeding tariffs, only maintained a struggling existence until the Civil War period, and the commodities produced were of the cruder sort. As the western lands were opened to settlement, as the turnpike, canal and railroad were extended into western territory, transportation was cheapened, and centers of production and consumption became widely separated. As the towns and cities grew they became the markets for the surplus products of the farm, while they as manufacturing and commercial centers gave shape to the raw materials of the farm and mine, and sent them out again in the form of farm implements and more highly worked up food products. There gradually emerged three classes of markets: the local, the city, and foreign markets.

With the rise of the factory and the perfecting of facilities for communication and transportation, it became economically advantageous for each community to limit itself largely to the production of classes of products for which it was adapted. In obedience to this principle the South grew cotton and rice, the West, grain, and New England manufactured textile products and shoes. The territorial

specialization made necessary distributing centers—each creating a mechanism for reaching consumers over very diverse areas.

The chemical laboratory with its practical investigations is responsible for the multiplication of food products and the introduction of by-products. The triumphs of practical chemistry have given a commercial value to hundreds of things that were formerly considered pure waste. Things have been so cheapened that many things are now accessible to the poor which formerly were considered as luxuries for the rich. The facilities afforded for the preservation of fruits and other food products in course of transportation have greatly broadened the scope of markets. It was inevitable that such forces would make complex the mechanism for the sale of products.

The distributive factors which appeared were the manufacturer, the commission merchant or broker, or commission agent or selling agent, the jobber, the travelling salesman, and the retailer. It is not maintained that all these groups were necessary to sell all classes of products. Many commodities were distributed through other channels than these. Certain classes of manufactured goods were from the outset sold to retailers. The manufacturers often sell to retailers as well as to jobbers, while the jobbers frequently sell to consumers as well as to retailers. The groups of exchangers referred to are presented as typical for the distribution of a large class of commodities.

In the distribution of goods of foreign manufacture, the number of groups of exchangers was even greater. Many classes of goods passed through the hands of the agent of the foreign manufacturer, the foreign exporter, the American importer, the jobber and the retailer. When the producer and the consumer were so widely separated there was of necessity a large margin between the producers' and consumers' price. These distributive factors had to be supported and in absence of effective competition the profits were considerable. Since the United States became a manufacturing nation fewer middlemen were required to distribute American than imported commodities.

Up to a certain point the increased number of factories, division of labor in factory and territory, an increased number and variety of commodities produced, and better facilities for transportation, all coöperated in developing distributive channels which separated the producer farther and farther from the consumer. Within the last thirty or thirty-five years, other forces have been operating to bring them closer together, and to reduce the cost of marketing. As soon as manufacturing became an important industry in America, and when large amounts of capital were utilized in single plants, the manufacturers became more independent of the middlemen, and competition between the latter led to economy in methods of marketing.

In the marketing of foreign goods the jobber was compelled to carry a general supply of commodities to meet the demands of retailers.

With the rise of the American manufacturer there has been introduced an important change in selling goods known as "dating ahead." Frequent changes in fashion and other changes in the wants of customers resulting in violent price fluctuations caused manufacturers to abandon the old policy of haphazard production for one of producing to fill definite demands after goods are sold. This method has now become quite general. The manufacturer sends his agent to the jobber in the fall and winter to take orders to be filled in the spring and in the meantime the goods are produced and shipped. Some manufacturers make a practice of dating twice a year, and others do so more often. The jobber goes to the retailer and dates ahead in the same way. In many cases the manufacturer deals directly with the retailer in this manner. Where the manufacturer is engaged in only one process of manufacture, orders are then taken of another manufacturer, who carries the process a stage farther.

Wherever the system has been introduced the strategic position of the manufacturer has been improved. Instead of producing what he thinks will be demanded his plant is operated to produce what has already been sold. The producer and consumer are brought more closely in contact, as orders for goods emanate from retailers who know consumers and their wants. The speculative burden is shifted to the retailer whose greatest danger lies in over-purchasing, as his goods may be ordered several weeks or months before they are offered for sale.

The rôle of the commission merchant is less important now than when American manufactures were but little developed. He purchased commodities on his own responsibility or sold them on commission to jobbers, retailers or consumers. He was an independent dealer and often advanced capital to the manufacturer. With the growth of the plant of the American manufacturer, the commission merchant has been compelled to give way to selling agents of the manufacturer.

With the growth in the size of the plant the manufacturer is coming to hold the strategic position in distribution. In volume twenty-five of the Annals of the American Academy of Political and Social Science on American domestic markets, Professor Jones of the University of Michigan has shown how the manufacturer is fortifying his position by securing control of raw materials, and by undertaking the various processes of manufacture under a single management, by producing by-products, and by controlling certain other manufacturing processes subsidiary to the main purposes of the plant. It was also claimed that the conditions under which the finished product is sold is determined by the manufacturer. The exclusive agency, the price contract, the factor or rebate plan, and the serial numbering plan are devices employed which narrow the field of the retailer and make

him dependent upon the manufacturer. Other sources of similar import could be mentioned.

The opportunities afforded in advertising through various avenues —the magazine, trade journals, daily papers, bill posters, etc.,—and the specific methods of brands, seals, and trade-marks, have done perhaps more than any single thing to bring the producer directly in contact with the consumer. As soon as the manufacturer could talk directly to the consumer, his prosperity was no longer dependent exclusively upon the various classes of intermediate agents between him and the consumer. When the reputation of certain classes of goods was established, they practically sold themselves.

The need of introducing the rapidly increasing supply of new commodities which could be conveniently produced, coupled with the conservatism of the retailer, made talking to the consumer by the manufacturer imperative. Retailers have been all along slow in introducing commodities when they can just as well sell commodities for which there is a regular demand. If they assist the manufacturer by advertising something new, then competitors will share with them the rewards of their enterprise. In the very nature of things it was impossible for the retailer to bear the brunt of advertising and introducing new commodities. The brand, seal or trade-mark gave the manufacturer an opportunity not only to introduce a good of specific ingredients, but to keep the firm name before the public. In practically all other methods of advertising, as in this case, the manufacturer realizes exclusively on his enterprise. It is a feature inherent in the situation, then, that the manufacturer must introduce his goods and in doing so he is freed from the restraints imposed formerly by mercantile institutions.

Within the mercantile business itself have arisen organizing forces which reduce the cost of marketing. Of these the most important are the department store, the mail-order house, and the coöperative purchasing combines of various sorts.

The department store which organizes all the factors of distribution had its origin in the United States in the Wanamaker store of Philadelphia in 1876. Since then the department store business in the United States has had a steady and consistent growth.

While vast amounts of capital were being invested in transportation and manufacturing concerns it was inevitable that this tendency would find expression in mercantile life, and consequently we have the enormous retail and jobbing institutions in our larger cities.

The economies effected by the department store are many. In organizing the factors of distribution in a single institution the costs and profits of other middlemen are saved. In large scale advertising goods may be advertised extensively with but relatively little cost. In purchasing in large quantities and by expert buyers good bargains

are made, while the costs of transportation are less for car-load than less than car-load quantities. The savings from discounted bills on large purchases are considerable. The rent, heating and light economies are large items.

While some manufacturing enterprises and several department stores conduct a mail-order business, the mail-order house is an independent mercantile institution. Appearing in industry at about the same time as the department store, its growth has been somewhat similar to that of the latter institution. The department store meets the needs of the consumer in the cities, while the mail-order house reaches consumers in the small towns and rural districts. Advertising through the large catalogue or purchaser's guide is its medium of reaching consumers. Like the department store, it organizes the factors of distribution in a single institution, and effects its chief economies in doing so. To accomplish the same ends retailers in several cities have organized themselves in coöperative purchasing combines. In the grocery business the chain stores or a large number of stores under a single management accomplish practically the same results.

Within the last thirty-five years many striking changes have taken place in mercantile industry. But with these rapid changes the reduction in the costs of distribution have not kept pace with the reduction of the initial or manufacturing costs. In other words, relatively speaking, the costs of distribution have increased. Several causes are responsible for this:

1. Generally speaking, industrially progress has been in a large measure due to the introduction of machinery. As machinery plays a much more important role in the production than in the distribution process, the reduction in costs resulting from improved machinery will be greater in the former.
2. In production it is much easier to compute costs of various factors than in distribution. Where this can be done it is easier to experiment and thus eliminate unnecessary expense elements in doing so.
3. The advertising costs of distribution are extremely difficult of computation. At points where this is especially true an advertising warfare between firms may result in raising the price of commodities offered for sale.
4. In production when a new machine surpasses an old one the latter is discarded without question. In distribution the wage and salary cost is a much more conspicuous item than the wage and salary cost is in production. Consequently when displacements occur in distribution, they are displacements of men to a greater degree than in production. A more homogeneous and intelligent class are engaged in distribution than in production, and resist vigorously changes which threaten them.

The Internal or Administrative Organization of Mercantile Concerns.

—The development of the large mercantile or manufacturing concern has given rise to new fields of economic study, the internal or administrative organization of business. In the larger plants the leaders have seen the necessity for and the advantage of a thorough-going organization of the work. An army of employees needs to be thoroughly organized. There must be a careful differentiation of structure and functions of the organization with authority and responsibility resting in heads of the different divisions and subdivisions. In such an organization the advantage gained in the use of experts, or men of great ability at the head of divisions or sub-divisions is almost immeasurable. What is said here of the mercantile concern will apply with equal force to all other large industrial enterprises.

In traditional economic theory the subject of economics was divided into four divisions: production, exchange, distribution, and consumption, and of these exchange and distribution have received most attention. The discussion has centered very largely upon the politico-economic point of view, and the scientific work was frequently submerged in the endorsement of governmental policies. Very important topics were the tariff, the money question, ship subsidies, the justification of interest, and so forth. Economics seemed intended to reach conclusions which would influence legislation along certain lines. (Much of the prejudice against it in the past has been due to its political bearings.) The investigation of phenomena first-hand and their classification regardless of influence of the results was never thought of very seriously.

In the department of production only the general aspects received consideration. The treatment centered about the problems of the division of labor and territorial specialization. Even here the conclusions were long-range deductions. In the discussion of the division of labor but little improvement was made upon Plato's analysis. The current economic texts of today improve but little on the theory of the division of labor of Adam Smith. But little investigation was made into the internal organization of business concerns. Until the latter half of the nineteenth century there was perhaps some reason for this absence of data. With the appearance of the large industrial units, however, we have a considerable body of new economic data subject to analysis and classification.

In the current treatment of the division of labor, two important elements, the coördination of the various phases of industrial concerns, and the unification of work, have been neglected.

In the internal organization of industrial concerns we have at present a great mass of data. Every business house employs a staff of experts to record accurately every transaction of financial significance to the management. This information puts the manager in

possession of all the facts with reference to the efficiency of the organization at every stage of the enterprise. In the determination of the efficiency of the organization the profits of the concern are the guiding force. All this data is kept in permanent form by the system of bookkeeping.

We have also the generalizations of business men, taking the form of policies which are of scientific significance. These generalizations have weight when approved by the business experience of others. Business principles are thus formulated by the greater captains of industry, based upon practical experience and stimulated by the desire for gain. These results are of great validity as they are tested by success or failure.

Within recent years great advancement has been made in the development of machinery for the preservation and advancement of this class of scientific knowledge. Our accountancy and bookkeeping systems have almost attained the dignity of sciences themselves. They preserve past experience, analyze and classify facts, and make easy the understanding of problems very difficult of comprehension in their absence. They put the man at the head of affairs in control of the industrial machinery so that errors can be discovered and adjustment made.

Our larger industrial enterprises are divided and subdivided into various groups. In some of our department stores, for instance, the number of departments range from fifty to one hundred. At the head of the various divisions and subdivisions under which the departments are organized, there are expert leaders who have definite functions to perform with corresponding responsibility, and at the heads of the departments themselves are competent superintendents. In the larger concerns only the most general control is exercised by the superintendent or manager. The details are to be carried out under the orders of the superintendents of the different divisions and subdivisions.

It is generally assumed that competition takes place only between rival concerns. In the larger business enterprises competition is almost as active within as without. Within competition is an active, progressive force, and managements avail themselves of its service. There is a rivalry between different departments, and between different groups and individuals, which is often just as active as the rivalry between different institutions. Here the organization puts the limits to competition and controls it where competition would be unprogressive, and provides the circumstances for its active work where it is most progressive. Competitive conditions, on the other hand, determine frequently the form of organization. We think of competition usually in connection with the making of prices. Competition plays just as important a rôle in rendering excellent service, or in

seeking customers, or, from an individual point of view, in doing efficient work as a basis of advancement. Through organization business men have learned to shape competition and secure the best results of which it is capable.

The Facilities for Presenting the Data of Mercantile Institutions in our Higher Educational Schools.—Assuming that there is a body of knowledge in mercantile and industrial organization which may be analyzed, classified, and which may serve as the basis for generalization, this question arises: Is it procurable? Is it available for the teacher's purpose? The literature in these fields at the present time is decidedly limited. What would be the attitude of the business man in making the facts of his business common knowledge? In recent years business men have assumed an attitude favorable to the scientific development of economics. They are becoming much more communicable among themselves. In trade organizations they have discovered a consciousness of kind, and have abandoned the idea of cornering all trade secrets. Among the larger houses there is a tendency to compare systems, and often to put competitors in possession of their methods of business. They have come to feel that free trade in business methods is a safer guarantee to business success than high tariff walls. They believe that a more thorough knowledge of business principles by the public would not be detrimental to their business. Mr. Frank A. Vanderlip, vice-president of the National City Bank of New York City, in an article in the *Business World* for August, 1905, on "A New College Degree," says: "If we had in our universities professors capable of a thorough scientific understanding of the principles underlying many of the problems of finance and commerce, these men would help us to see distinctly and to think clearly in regard to some of our everyday practices and tendencies. The dissemination of such knowledge would surely be of great value."

With reference to the value of business knowledge in a good, liberal education, he has this to say: "I believe that in a proper education, the highest work in commercial life might be so outlined as to be entirely in harmony in its practical application with the ideals of those who conceive that a university should be a place for scientific research, a place where the scientific habit of mind should be sought purely for the love of truth."

Business men are coming to believe that a knowledge of the general principles of business is of value to the young man beginning a business career. They do not believe, nor does the college man believe that this knowledge of general principles of business, which may be presented in a university, will afford to the student a "short cut" to a business career. The training to fit into a certain place or department of business can be acquired only by meeting and solving the everyday problems which arise in that specific line of work; but a

thorough-going knowledge of the general principles will give the apprentice an imagination and a point of view which will lift him in efficiency above the individuals who lack this training.

The economist has been following too long traditional methods. His work is even today too largely deductive. In geology, the data of science is in the soil and rock; in botany, the data is in the plant kingdom; in economics, if we are to be scientific, the data should be in the business world, and ought to be procured first hand.

TRAINING FOR GOVERNMENT SERVICE

By DR. E. DANA DURAND

Special Examiner in the Bureau of Corporations

It may doubtless be assumed that in discussing training for government service, we are here chiefly interested in that training which would fall within the scope of a school of commerce and economics. There are, of course, many branches of the government service which require technical training in altogether different lines.

It has seemed to me that, if I could contribute anything of value today, it would be in the way of indicating the extent of the opportunities for men of special economic education in the government employ, and of describing the nature of the work to be performed, rather than in the way of discussing courses of study and methods of instruction. The latter task may be left chiefly to the faculties of the departments of economics and commerce in the universities. The suggestions with reference to instruction are ventured in a very diffident manner.

There is possibly some danger of overestimating the number of government positions for which special education in economic and kindred subjects is or ever will be effectively demanded—to use an economic phrase. Much the greater part of the work of our national, state and municipal governments has little to do with economics. It is either concerned with other arts or sciences, or it is of essentially routine character. For many of the higher administrative positions even in government services not connected with economic matters, there would perhaps be some advantage in having men with a good general knowledge of economics, political science and sociology, though I would by no means advocate making the academic element a dominant one. But the legislators and appointing officers in the various grades of government do not now recognize and probably will not within a reasonable time in the future recognize the need of any high degree of education in economic and allied sciences as a qualification for positions of this character.

The national, state and local governments do, however, undertake

an enormous amount of work that is essentially economic, and the the scope and extent of work of this character is growing apace. For proper performance of this work it is desirable that there be, in the more responsible positions, a large number of men who have been thoroughly trained in schools of commerce and economics. I do not mean that only men so educated should hold these positions. It may be that a man who has gained his ideas on economic matters from experience in law, journalism or business, coupled with general reading and observation, has made conspicuous success in public service of a technical economic character. But in general the man who has thoroughly and systematically studied the various social, economic and political branches of science will obviously be better fitted for such public service.

More important than the question what is desirable is the question what is desired by those in authority. What are the chances that the student who has specialized with a view to the government service will find his training helpful in getting a job? I think one may answer that the chances are fair, and that they are increasing every year. The importance of having specially trained and thoroughly competent men for the more responsible positions in the economic work of the government is not yet by any means sufficiently appreciated by law-makers, executive officers or the general public. But the desirability of having them is more appreciated today than ever before, and the trend is distinctly and rapidly in the right direction. This is, to be sure, far more true of the federal government than of the state and local governments, but the influence of the former is bound to react upon the lower grades of government.

The opinion is still widely prevalent that men who have studied economics in the universities are mere theorists, unfitted to deal with practical problems. This opinion, which was always an exaggerated one, is gradually giving way as our universities are more and more emphasizing the study of practical economic conditions. If those in charge of our educational institutions will lay still greater stress on such practical study, they will, we may trust, still more break down the distrust of the academic economist.

With this introduction, let us pass to a brief enumeration of the leading government departments and bureaus which are largely concerned with economic and related problems.

The Department of Commerce and Labor doubtless offers the broadest field. Its bureaus of the Census, Labor, Corporations and Statistics, which together include some thousands of employees, are or should be, in large measure scientific investigators of economic conditions. Somewhat similar fields are covered, though usually much less efficiently, by the many bureaus of labor or of industrial statistics in the several states, by state bureaus for the inspection of

factories, mines, etc., and by state and municipal authorities dealing with vital statistics. In the federal Department of Agriculture also much economic and statistical investigation is being made, and the same is true in some measure of similar state authorities. The work of the Interstate Commerce Commission and of the numerous state railroad commissions ought also to demand special economic training for at least part of the employees.

There is no question also that work in the diplomatic and consular services, including some positions in the State Department at home and more abroad, would be improved by a large infusion of men trained in the commercial and economic departments of our colleges and universities. At present these services are not under civil-service rules, and appointments have been too often made for considerations other than fitness, but there is good prospect of a change for the better in this respect.

Another class of services in which there is need of much more recognition of special training than exists today consists of those which have to do with finance in its various branches—not only public finance proper, but also money, banking and insurance. Our financial policy, national and local, is largely lacking in scientific basis. Recent appointments of such men as Hollander, Jenks, Willoughby and Charles A. Conant in important temporary or permanent positions of this sort give ground for hope that college men will more and more find openings in the secondary as well as the highest work in the financial and quasi-financial departments of the government.

While the more important fields have thus been cursorily mentioned, it may be said without further enumeration that there are, in various other government departments, even in some of those which have in general least to do with economic questions, a considerable number of positions for which special training in economic and kindred subjects is clearly desirable.

What now is to be said with reference to the nature of the work which the economic specialist may find to do in the various branches of government service named?

It should be noted at the outset that, even in those government departments that are most concerned with economic and allied matters, the great majority of the positions are essentially clerical. For such places no special preparation, other than a good secondary education, is required. Moreover, in many, if not most, instances experience in this purely clerical routine work is not particularly useful as a training for the higher positions. There is, in my judgment, too marked a disposition, under present civil-service rules and the practice of appointing officers, to fill the more responsible positions by promotion from the lower ranks. This is often carried to the extent of bringing to the top men who after all are essentially clerks

in nature and training. Such a policy is in itself a hindrance to the entrance of well-trained specialists into government service. But it is one of the marks of progress that the excessive preference for promotion is giving way to a recognition of the essential difference between the qualifications required for mere routine work and those required for scholarly and discretionary work.

Above the clerical level there are, of course, many gradations. Broadly speaking two main strata may be distinguished. The first consists of positions in which the work, although requiring special knowledge and judgment, is almost wholly under direction; the second of those where it is largely independent, responsible and discretionary.

Work of the first grade mentioned may perhaps be broadly subdivided into field work and office work. These two are not exclusive of one another. In practice many men pass from one to the other as the exigencies of the service require, and this arrangement is often beneficial both in the field and in the office. The field agents of the bureaus of the Census, of Labor and of Corporations are the most conspicuous examples of the former class. The business of the field agent is to collect economic and other statistical data at first hand, to conduct interviews, secure access to records and abstract them, and the like. Unfortunately the importance of good field work has been generally greatly underestimated. Many of our statistical reports are well nigh worthless because the original material has been gathered with so little care, intelligence and honesty. Trained economists are still rarities in field investigations for the government, and even college men are the exception. Fortunately there is a distinct tendency toward insistence on higher qualifications. Much field work in the bureaus mentioned and in others of kindred character needs men who know a great deal about economic conditions and about business methods generally, men of sound judgment, critical spirit, mental honesty and industry—men, in short, such as a school of economics and commerce is well fitted to produce. Some field work, indeed, notably in the Bureau of Corporations, is so important and difficult that it must be classed with the higher rather than the lower of the two main groups heretofore distinguished. Aside from education, certain personal elements—good address, tact, perseverance, force—are required in the field agent, more so even than in the office worker.

The permanent field agents of the Census Bureau are for the most part paid \$1,200, a few \$1,400 per year; those of the Bureau of Corporations from \$1,400 to \$2,500, but the higher salaries are given only to men of much experience and cannot be expected by those just out of the university.

Office work in government bureaus which have to do with economic and allied subjects is so varied that only a rough idea of some of the main classes can be given. Among tasks of a subordinate character

which yet call for special economic training may be mentioned the planning, supervision, criticism and interpretation—all in their more detailed aspects—of statistical tables, the direction of field agents and the criticism of the material they send in, the compilation and abstracting of information from published sources or from original investigations, the translation of documents, and similar tasks. The man engaged in such work may or may not have clerks under his direction. Evidently work of the kinds described is essentially scientific. It calls for scientific knowledge of facts and still more of methods and for the scientific spirit and judgment which, though not the monopoly of men trained in economics and kindred branches, are certainly more likely to appear among such men than among most others. The number of positions requiring work of this character is very considerable, and is constantly growing. The man just out of the university who happens to get a position of this sort may expect at the beginning to earn from \$1,000 to \$1,400.

A rather wide interval, which, however, is occupied by an unbroken series of gradations, exists between the lowest and the highest types of government work along economic lines. By the highest class I now refer to work falling within the limits of positions in the "classified service," as it is called, in the federal government,—that is, the service ordinarily entered by competitive examination. The employee of this rank, though in large measure independent and responsible, is ordinarily subject to the immediate direction of a bureau chief, who is a presidential appointee. The highest grade in the classified service includes, for example, chiefs of division and expert special agents and investigators. To such men often falls a large part in the execution of policies, the direction of employees, the planning of investigations and the drafting of reports. The number of places of this sort is comparatively small; the maximum salary is usually from \$2,500 to \$3,000.

It is evident that the qualifications required for positions of the sort described are decidedly higher than those needed for positions at the bottom of the ladder of scientific work. Not every man trained in the school of commerce or economics can hope for one of these more responsible places. Usually they are filled as the result of gradual promotion; though in some cases, where new blood is needed, men who have already won their spurs outside in academic life, in journalism or in law are properly enough brought in.

But, I seem to hear the ambitious student ask if this is the best prospect government service can offer me, with all my special training? Are these the limits of salaries for specialists? Can I not hope that my education will at least count somewhat in competition for still higher places—such as the headship of a bureau or even a department? I fear that encouraging answers to these questions cannot

honestly be given. It is generally recognized that the government, especially perhaps the national government, underpays its more responsible workers in all departments. And this is likely to continue true, though there may be some increase in the scale of compensation. But after all government service pays quite as well as teaching, the occupation which so large a proportion of our university graduates enter. Both professions must rely for getting good men on the existence of other motives than the desire for money or for power. Neither can compete with private business in financial inducements. If our schools of commerce really succeed, as I understand they hope to do, in making most of their graduates men whom the world of business will demand, they cannot at the same time expect to contribute largely to government service, unless they preserve and cultivate other ambitions besides that of acquiring wealth.

Moreover, the man with ambition for political power can count on little help from special university education in any other subject than law. Bureau chiefships and other positions outside the classified service are occasionally filled by promotion, and still more rarely by the appointment of men who have become conspicuous in academic or allied scholarly pursuits. But usually other considerations and qualifications, sometimes perfectly legitimate, sometimes otherwise, determine such appointments, and this is likely to be the case for a long time to come. I may add parenthetically that a purely academic government service is in no way to be desired. It doubtless would be well to have more men of special education and experience in economic lines occupying political positions, but the practice might be carried too far. A good deal of the work of the bureau chief, for example, is business and not science.

Having seen thus the general nature of the positions in government service for which special training in economic and commercial courses would be desirable, we turn to this important question: By what procedure can the man so trained enter public employment, and what are his chances in competition for appointment? In discussing this question I must confine myself almost wholly to the federal government. In a few states where the civil-service examination system exists, as in New York and Massachusetts, the conditions bear some resemblance to those in the national government, though the system is usually much less satisfactory both in form and in administration. In most states, however, appointments generally are still made with little consideration of fitness, so that the college man's chances are slight; and to discuss in any definite way the probability of future improvement would be mere guesswork.

Leaving aside the places, usually of a confidential or financially responsible character, which are by law or general rule exempt from examination, nearly all original appointments in the federal service

are made under competitive examinations, though appointment by special exception, under order of the president, is still not uncommon. A third method, non-competitive examination, might be used, but is at present confined to testing fitness for promotion.

As nearly as I can ascertain, only a few examinations have ever been held by the national Civil Service Commission, for the special purpose of filling positions in economic and statistical work. This is partly due to the fact that, until recently, those in authority have been content that many positions which should have been occupied by men at least in some degree specialists should be held instead by clerks of very ordinary qualifications, or by men promoted solely on the basis of their office experience. Just so far as this policy continues the man specially educated in economics and allied subjects will stand only a fair chance of getting into the government service at all, in competition with the many who take the examinations in which no special stress is laid on economic subjects. Under conditions as they have been for the most part in the past, moreover, the specialist in economic lines who happened to pass a clerical examination had no certainty whatever of getting an appointment at the kind of work for which he was particularly fitted. Candidates from the clerical rolls are called for by many departments and the man who stands at the top must go where he is first drafted or run the risk of waiting long for a place. But, as already suggested, there is a constantly growing recognition among the powers that be of the need of economic training in certain branches of the government service. This means that more and more special competitive examinations will be framed which will give the man of superior training a far better chance of appointment. Indeed several examinations have been given recently in which tests for fitness to handle economic subjects were decidedly severe, and the results proved quite satisfactory. At present many a college man feels it beneath his dignity to compete in a civil-service examination. This feeling should largely disappear when the requirements become such as to properly test fitness for responsible work, and at the same time to limit the number and improve the character of the competitors. Despite many criticisms as to the unpractical nature of the tests it has prescribed, the United States Civil Service Commission is entirely willing, and, with the aid of specialists already in the service, entirely able, to frame examinations which shall effectively and fairly determine fitness even for highly specialized work. All that is needed is that appointing officers should demand such examinations. As a matter of fact hundreds of examinations have been held for highly technical positions in other than economic lines, examination, for example, involving the highest mathematics, chemistry, physics, architecture and engineering.

It is objected to the examination system that the man who has

crammed his memory just before the examination, or the mere book man, is likely to surpass one of really broader scholarship and greater efficiency. But this danger can be, and often is, largely obviated by including previous achievement as one of the tests in the examination. By this arrangement the studies the candidate has pursued, the degrees he has received, the publications he has issued, and his success in his profession or business, are all allowed direct and large weight in determining his rank. Indeed in some competitive examinations by the Civil Service Commission these factors have been almost the only tests considered. With this disposition manifest there is reason to anticipate that more and more examinations for positions along economic and kindred lines will be held in which a degree from a school of commerce, together with other evidences of successful work done by the student, will alone give him a marked advantage in competition, and in which, moreover, the direct questions will be such as to make such education count very heavily.

It is almost exclusively through competitive examination that men just out of the college or university will have to enter the government service. The appointments to all of the lower positions will continue to be almost wholly made by this method. Most of the higher positions within the classified service will probably always be filled by promotion. I am inclined to think, however, that we shall see in the future a considerable number of special competitive examinations held even for places of great responsibility and requiring advanced technical training. The system can be carried further with respect to economic work just as it has been with respect to other government scientific work. The difficulty sometimes arises that the man who passes the best examination, whatever the tests applied, may be lacking in certain personal elements—such as address, tact and force—which are essential for the more responsible positions, especially in connection with economic investigations. This difficulty, however, is partly obviated by the liberty given the appointing officer to choose among the three highest candidates or to reject an entire roll of candidates. Aside from the restraint which it places on abuse of the appointing power, there is another marked advantage in the competitive system in certain cases. By the wide advertisement given to the examinations men of special qualifications who might otherwise have remained unknown to him may be brought to the attention of the appointing officer.

It still remains true, however, that there are cases where competitive examination, even though great weight is allowed for previous attainment, cannot be a wholly satisfactory method of securing men fitted to exercise broad discretion and to do highly responsible work. Advantage may accrue to the government service at times by allowing the appointing officer, under proper safeguards, to select

men without competition. He may know of one who is obviously just the man for the place, one who has specialized in just the line desired and who is a recognized authority, or who combines in an exceptional manner the personal characteristics required. Appointment without examination in such a case saves time and expense, and precludes the possibility that some unfortunate arrangement of the competitive tests may exclude the very best candidate. As a matter of fact, a considerable number of positions in the classified service, in government bureaus dealing with economic and allied problems, have recently been filled by special exception order without examination. This is true, for example, of some of the best appointments in the Bureau of Corporations.

Such a method of appointment may be abused, under a weak or partisan executive officer, but abuse might, it seems to me, be largely precluded if, instead of allowing the President the first and exclusive jurisdiction to authorize exceptional appointments, the law should require the approval of the proposed appointment by the Civil Service Commission before action could be taken by the President. Already it is customary in making exceptions to lay before the Commission some evidence or statement regarding the special qualifications of the candidate, but this is largely perfunctory. It might easily be required that full and precise evidence of superior fitness should be submitted. Or, in addition to previous attainment, the Commission might submit the candidate to a severe non-competitive examination. If non-competitive examinations can be properly used in connection with promotions there seems no reason why they should not be used in connection with original appointments to the highest grades of the classified service, in particular instances.

We turn now finally to consider the nature of the instruction desirable for those students who aim to enter branches of the government concerned with economic and social problems. I must at the outset admit a large measure of ignorance as to just what instruction is already being given in many of the universities and schools of commerce. It is probable, however, that in a number of our best institutions most of the courses needed are already being offered.

If there is one point which should be emphasized more than another it is the desirability of a broad foundation. There is danger of too early and too narrow specialization in many branches of modern education. From the standpoint solely of personal success the student should indeed seek a broad training even more for government service than for a private profession. For, aside from the superior efficiency it will tend to give him, it will open more avenues for appointment. As conditions now exist the man who would enter government employ has less opportunity to choose for himself the precise nature of the work he shall do than is the case with men entering most

other professions. The ways he must take are narrow and some are at times closed entirely.

At the same time the greatest success in government scientific work, as in other scientific work, is usually achieved by the specialist. The man who has the patience to work up gradually in the government service to just the influential place he wants, or to wait for it while remaining in private employment, will do well to carry his studies in the university to a high degree of specialization. But let him build his structure on a broad foundation of culture studies and of economics and allied sciences, that he may strengthen his intellect, broaden his judgment and increase his ability to deal with new conditions and problems.

As a preparation for government positions in the lower of the two general classes distinguished in this paper, there is comparatively little need of close specialization within the broad field of economic and social science. It would be well for the student, in addition to the ordinary culture studies, to take practically all the courses in economics which are ordinarily offered in our better colleges, or which are considered primarily undergraduate studies in the larger universities. The most advanced courses are not perhaps necessary as a preparation for work of this grade. It goes without saying, however, that in addition to a good elementary course in economic principles, the aspirant for government employment should have comprehensive courses in descriptive economics. If possible there should be in every school of commerce three courses of a somewhat general character on this field, aside from others which are more specialized,—or perhaps all three might be comprised under the name of one course, provided adequate time were given to it. This course or courses should include (1) the elements of economic history; (2) general description of the national, and to some extent of the world's, industry and commerce, showing the nature of the leading commodities, the place and method of their production, and the methods of transporting and marketing them,—practically what I understand to be meant ordinarily by commercial geography, though it is by no means confined to commerce proper; and (3) a description of commercial and industrial organization, dealing with the nature, organization, operation and interrelations of the various institutions of business. Unfortunately as yet the material for the proper presentation of these subjects is limited, but it is in securing and systematizing such material that, as it seems to me, the schools of commerce are doing and have yet to do their greatest service.

The more specialized courses in practical economic problems which, at least in elementary form, are desirable for every man seeking government employment in the lines under consideration, include money, banking and exchange, public finance, labor problems, and

transportation, all of which are usually taught in a fairly satisfactory manner in our better institutions, though much yet remains to be desired in the way of securing an adequate basis of facts from which to draw generalizations.

For the purpose of preparing for government service, emphasis should be laid upon the bibliography and sources of information in connection with all the courses above suggested. Indeed a short course dealing especially with bibliography and sources would be advantageous. The student should be made familiar with the scope, functions and publications of the various government departments, state and national, which deal with economic and kindred subjects.

A fairly thorough course in statistical methods is also needed as a preparation for government work in almost every branch within the broad economic field. Statistical data do not, of course, constitute an independent science; they are merely a part of the data of other sciences. In other economic courses, if properly taught, the student will learn not a little of the manner of handling and interpreting statistics. But this method of presentation is so large a factor in government work that a separate course in the art of statistics is desirable. It should include instruction and practice in the methods of collecting, editing, tabulating, diagramming and interpreting statistical facts in various leading subjects.

Again, as a preparation for government service, the student should learn the general principles of bookkeeping, of which, elementary as they are, many a college man is lamentably ignorant, including also the rudiments of the higher art of analyzing and interpreting accounts. He should have some instruction also in elementary law, one or more courses being designed with special reference to industry, commerce and labor and covering the field in such a manner as to be most useful to the man who is not a lawyer. A general course in political science and administrative law, with emphasis on the practical working of the American governments, is exceedingly desirable, as is also an elementary study of constitutional law and constitutional history.

The training which has been outlined would go far toward fitting a man for a secondary position in the scientific government service. He who aims at places of high responsibility ought to take all this and more. Whatever the special field toward which he would turn, he would do well to push further along the several lines of study already indicated. It would hardly be doing too much if he should take all the courses in economics which are offered in our best universities, as well as some work in law and political science beyond that required as a preparation for the more subordinate positions. He would best, in my judgment, not specialize too narrowly.

Excepting perhaps in the financial or quasi-financial, and in the diplomatic and consular services, the student who seeks such highly

responsible work will almost always find useful a more thorough training in statistical methods than was suggested above. It seems to me that the best of our universities and schools of commerce should maintain statistical laboratories, giving concrete and practical experience. Let the student, for example, be set the problem of planning broadly a statistical investigation, determining the sources of information to be sought, drafting schedules, and mapping out tables and diagrams. Let him be given statistical schedules already filled out to criticize and revise. Let him analyze, summarize and interpret in a thorough manner selected published statistics, criticizing the methods of presentation given in the reports.

If schools of commerce and universities wish to prepare men for the most technical and responsible economic work in the government service, they ought, in view of the intensely difficult but intensely practical nature of the problems such men will have to face, to give even more advanced courses than are now offered in the various phases of actual economic life, past and present. The nature of the different government services in most instances suggests clearly enough the lines of specialization for the student. For work in financial and allied subjects there are evidently needed more advanced courses in public finance, money and banking, and insurance. For high positions in the Bureau of Corporations, the manufactures division of the Census and the Interstate Commerce Commission, or in similar offices in the states, there should be special study of industrial and commercial geography, methods of producing, transporting and marketing products, and methods of organizing and managing enterprises; and also a more thorough training in accounting than is needed elsewhere. These same courses (except perhaps the accounting) would also be very useful training for the foreign consul, for in order best to aid our foreign trade the consul needs to know thoroughly industrial and commercial conditions in his own country. Obviously, however, preparation for a consulship calls for more study of international commerce and of industrial and commercial conditions abroad than is ordinarily needed for positions in this country. For his legal and diplomatic duties the consul should have also a moderate training in international law, the civil law, and the commercial and industrial legislation of foreign countries.

Positions in the state department or in the diplomatic service abroad demand essentially the same sort of education as is desirable for the consular service, though here more stress should be laid on the political and legal aspects and perhaps somewhat less on the economic aspect. These places call for knowledge of the constitutional and administrative law of the leading foreign countries, of their history, and of the actual spirit and working of their politics and institutions.

Doubtless this may appear a rather discouragingly high standard

of education for positions which command no high pecuniary rewards. One cannot maintain that it is essential that all the courses suggested should be pursued in order that the student may secure appointment and succeed in his work for the government. Indeed, as was said at the beginning, men who have gained their knowledge of economic matters wholly outside of the college may often fill responsible positions with conspicuous success. In general, however, thorough economic training will surely tend to make a man more fit than his fellows for government work in economic and allied fields. And it is perhaps well to set up an ideal toward which to strive in such training, however far short of attaining it we may at first fall.

DISCUSSION**DEAN DAVID KINLEY**

The great difficulty in this country is, that we have not yet redeemed our position in the public service from the clutch of the politician. Now that state of affairs is becoming less prevalent from year to year. But the public of the country, not the economists, but the citizens of the country, the educated people of the country, are the only ones who can redeem us from conditions of that kind. And it will not be until that state of affairs has passed away that it will be well worth our while, generally throughout the country, to say to young men, "there is a line of activity which promises a career of great success and distinction."

I wish to express my thanks, and the thanks of the University, to the gentlemen who have so kindly helped us in making up the program, who have come so far in order to read their papers and take part in the discussions. I wish to assure you that we appreciate our very great obligation to you.

CHAIRMAN JONES

In the name of the visiting delegates I take the liberty of thanking Professor Kinley, personally, for organizing this conference, and of expressing our obligation to the University of Illinois for bringing us here and so hospitably caring for us during the conference.

UNIVERSITY OF ILLINOIS

INSTALLATION OF EDMUND JANES JAMES, PH. D., LL. D. AS PRESIDENT OF THE UNIVERSITY

PART IV.

THE GENERAL EXERCISES OF THE WEEK

OCTOBER 15-21, 1905

EDITED BY S. S. COLVIN, PH. D.



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PREFATORY NOTE

The general exercises of the week of the installation of President James began on Sunday, October 15th, with special services in the churches of Champaign and Urbana, and a religious service at three o'clock, at which the sermon was preached by the Rev. James G. K. McClure, President of McCormick Theological Seminary.

On Monday, October 16, occurred the dedication of the Woman's Building and the University address by Rev. F. W. Gunsaulus. This address is withheld from publication.

Tuesday, October 17, was State and Nation day, and the general topic of the day's exercises was "The State and Education." The military reviews took place on this day. In the evening the English Club presented the old English play, Frier Bacon and Frier Bungay.

Wednesday was inauguration day. In the morning occurred the formal reception of delegates with the roll call of representatives of universities, delegates from societies and other bodies, with responses from the representatives of a number of such institutions.

The Colleges of Medicine and Dentistry and the School of Pharmacy held their assemblies on the afternoon of Wednesday, and were addressed by Dr. John B. Murphy, the eminent surgeon, on "The Evolution of Surgery."

After a review of the University regiment by the Governor of the State, the academic procession formed at half-past two and the inaugural exercises proper began in the Armory at three o'clock.

On Thursday assemblies of the various colleges were held. The College of Engineering was addressed by Dean W. F. M. Goss, of Purdue University, on "The Student Engineer;" the College of Science listened to an address on "The Scientific and the Non-scientific," by Professor T. C. Chamberlain of the University of Chicago; the College of Agriculture was addressed by Col. Charles F. Mills, of Springfield, on "The Services of Norman J. Colman to American Agriculture;" the address before the College of Law was by Hon. J. McG. Dickinson of Chicago, his subject being "International Arbitration;" the College of Literature and Arts and the Schools of Music and Library Science were addressed by Professor A. Lawrence Lowell of Harvard University, on "The Elective System."

Other exercises of the day were the students' meeting, and the historical meeting in recognition of those who have rendered distinguished services to the University. During these meetings the various conferences also held sessions.

PROGRAM OF THE GENERAL EXERCISES

SUNDAY, OCTOBER 15

10:30 and 11:00 A.M.—Special services in the churches of Champaign and Urbana.

3:00 P.M.—Religious Service at the Armory. Sermon by Reverend James G. K. McClure, President of McCormick Theological Seminary.

MONDAY, OCTOBER 16

2:00 P.M.—Dedication of Woman's Building. Exercises in the Woman's Gymnasium. Addresses by Dean James M. White; Hon. Samuel A. Bullard, President of the Board of Trustees; President Edmund J. James. Address of Dedication by President Lilian W. Johnson, of the Western College for Women: Subject—The Need of the Day: a Correlated Democratic Education. Informal reception and inspection of the building.

8:00 P.M.—University Address At the Armory. Reverend Frank W. Gun-saulus, President of Armour Institute: Subject—Heroism of Scholarship.

TUESDAY, OCTOBER 17

9:00 A.M.—General Subject: The State and Education. At the Armory. Addresses by Hon. Richard J. Barr, Mayor of Joliet; Hon. James Hamilton Lewis, Corporation Counsel of the City of Chicago; Hon. Lawrence Y. Sherman, Lieutenant-Governor of Illinois.

1:15 P.M.—Military Exercises. On Illinois Field. Salute (13 guns) to Major-General John F. Weston, of the United States Army. Review of the University Regiment by Major-General Weston.

2:30 P.M.—Military Exercises. At the Armory. The Military Training of the Citizen Soldier. Addresses by Major-General Weston; Lieutenant-Colonel Julius R. Kline, of the Illinois National Guard.

8:00 P.M.—Presentation of Robert Greene's Frier Bacon and Frier Bungay by the students of the University at the Walker Opera House, Champaign.

WEDNESDAY, OCTOBER 18

9:00 A.M.—Formal Reception of Delegates. At the Armory. Address of welcome by Dean Oliver A. Harker. Roll call of Foreign Universities; Roll call of American Universities; Roll call of Learned Societies and Other Bodies. Brief Addresses by Dean Henry T. Bovey, of McGill University, for Foreign Universities; President James B. Angell, of the University of Michigan, for State Universities; President Ira Remsen, of Johns Hopkins University, for Eastern Universities; Chancellor Frank Strong, of the University of Kansas, for Western Universities; President Edwin B. Craighead, of Tulane University, for Southern Universities; Dean Harry Pratt Judson, of the University of Chicago, for the Universities and Technical Schools of the State; President Charles H. Rammelkamp, of Illinois College, for the Colleges of the State; President John W. Cook, of the Northern Illinois State Normal School, for the Normal Schools of the State; Principal James E. Armstrong, of the Englewood High School, for the High Schools of the State; State Superintendent Alfred Bayliss, for the Elementary Schools of the State.

10:30 A.M.—Assembly of the Colleges of Medicine and Dentistry and the School of Pharmacy. In the Chapel. Addresses by Dr. Daniel A. K. Steele, for the College of Medicine; Subject, Relation of the College of Medicine to the University; Dean Bernard J. Cigrand, for the College of Dentistry; Subject, Dental Science and the Common Weal; Dean Frederick M. Goodman, for the School of Pharmacy. Address by Dr. John B. Murphy, of Chicago; Subject, The Evolution of Surgery.

1:45 P.M.—Military Exercises. On the Campus. Salute (17 guns) to the Governor of the State; Salute (11 guns) to the Adjutant-General of the State. Review of the University Regiment by the Governor of the State.

2:30 P.M.—Formation of the Academic Procession.

3:00 P.M.—INAUGURAL EXERCISES. At the Armory. Addresses by Hon. Charles S. Deneen, Governor of Illinois; Hon. Samuel A. Bullard, President of the Board of Trustees; Hon. Andrew S. Draper, former President of the University, and Commissioner of Education, State of New York. Inaugural Address by President Edmund Janes James. Conferring of Degrees.

8:00 P.M.—Students' Torchlight Parade.

8:00 to 11:00 P.M.—Official Reception. At the Armory and Gymnasium.

THURSDAY, OCTOBER 19

9:00 A.M.—Assembly of the College of Engineering. In the Chapel. Address by Dean W. F. M. Goss, of Purdue University; Subject, The Student Engineer. Assembly of the College of Science. In the Physics Lecture Room. Address by Professor Thomas C. Chamberlain, of the University of Chicago; Subject, The Scientific and the Non-Scientific.

10:00 A.M.—Assembly of the College of Agriculture. In Morrow Hall. Address by Colonel Charles F. Mills, of Springfield; Subject, The Services of Norman J. Colman to American Agriculture. Assembly of the College of Law. At the Law Building. Address by Mr. Jacob McG. Dickinson, General Counsel, Illinois Central R. R. Co., Chicago; Subject, International Arbitration.

11:00 A.M.—Assembly of the College of Literature and Arts, and the Schools of Music and Library Science. In the Chapel. Address by Professor A. Lawrence Lowell, of Harvard University; Subject, The Elective System.

2:00 P.M.—Students' Meeting. At the Armory. Addresses by distinguished guests of the University.

1:00 to 4:00 P.M.—Inspection of University Buildings and Grounds.

4:00 P.M.—Historical Meeting. General Subject: Recognition of those who have rendered distinguished services to the University. In the Chapel. Addresses by President Edmund J. James; Hon. Emory Cobb of Kankakee and Judge Joseph O. Cunningham of Urbana, former members of the Board of Trustees; Mr. Henry M. Beardsley, of Kansas City, Mo., and Professor Arthur N. Talbot, alumni of the University; Professors S. W. Shattuck, N. C. Ricker and T. J. Burrill.

SUNDAY, OCTOBER 15
RELIGIOUS SERVICES AT THE ARMORY
PROGRAM

Hymn: Duke Street.

Scripture Reading: The Reverend Charles M. Stuart, D.D., Professor in Garrett Biblical Institute.

Solo: Mr. Benjamin W. Breneman.

Prayer: The Reverend Doctor Stuart.

Hymn: America.

Sermon: The Reverend James G. K. McClure, D.D., President of McCormick Theological Seminary.

Doxology.

Benediction: The Reverend A. J. Wagner, Pastor of Saint Mary's Roman Catholic Church, Champaign.

**THE SUMMARY OF RELIGION AS EXPRESSED IN LOVE TO
GOD AND TO MAN**

THE REVEREND JAMES G. K. MCCLURE, D.D.
President of McCormick Theological Seminary, Chicago

Text: Luke 10: 27. Thou shalt love the Lord thy God with all thy heart, and with all thy soul and with all thy strength, and with all thy mind: and thy neighbor as thyself.

The appropriateness of this religious service to the great week on which the University of Illinois is entering needs no proof. The appropriateness is universally acknowledged. Our civilization as a nation is built upon the recognition of a personal God, through Whom life is given and supported, and to Whom every soul is responsible. Our history as a State is crowded with the recognition of God, for Illinois upon all its large occasions has never hesitated to bare the head and the heart in the Divine Presence and seek God's gracious favor. Education, too, rejoices in acknowledging the Most Wise, for education can have no greater mission than to discover the thoughts of God as expressed in the laws of physical nature and in the workings of the human mind, and then to apply God's thoughts to the welfare of the individual, the nation and the race.

In this University of Illinois may religion be a spur to study, an inspiration to research: may it put eagerness into the hearts and minds of all investigators: may it cause scholars to follow light, wherever light leads, with unflagging interest and devotion: may it

glorify every detail of investigation because such investigation deals with truth—with truth that, whatever its parts, is one truth—with truth that in any and in every manifestation is a declaration of God! Religion today and always would lift its hand in benediction and say to every student: Prosecute your search. Do your work. Only remember that truth, whether in physics, chemistry, or philosophy, is sacred—is of God. Therefore take the shoes from off your feet and stand in awe. You are on holy ground. Let not pride in the discovered, let not disdain toward the undiscovered, let not haughtiness toward predecessors be yours. But humbly, earnestly, reverently press on in the work God delights to have you do—the work of uncovering and disclosing the thoughts of the Most High. Surely the scholar who can in any wise make God better known must be very dear to the heart of God!

I am to speak to you now concerning this God and concerning what we call His religion. We never can be too thankful that when Christ was upon earth, He was asked a question that gave Him opportunity to state—in a sentence—what this religion is that the world calls Christianity, the religion of the God and Father of our Lord Jesus Christ. He summed it up in two statements that so correlate and complete one another that they virtually are one statement—when He declared that religion is the loving of the God revealed as Almighty Creator and Blessed Protector, with all our powers of heart, mind, soul and strength, and the loving of our fellowman as we love ourselves.

After years of study of the Bible and of human society I do not hesitate to say that that summary expresses the essence of religion—that the living of that summary solves every problem of human welfare, rejuvenating the individual and saving the race. God is glad with the gladness of satisfaction when that summary becomes the theory and the practice of life. There are hundreds of aids provided to assist us in the carrying out of this summary, the aids of the Scripture, the Church and History— aids that vary in importance from least to greatest: but the aids are not the essence itself—the essence is devoted love towards God Himself and toward man. When we live that essence we fulfil the supreme requirement of existence; when we live it we most develop ourselves, we most bless others and we most please God.

The first distinguishing characteristic of our religion is its spirituality. Our religion primarily is not a matter of the hand, the mouth, the foot—but of inner sentiment, named love. Our religion never exists until love exists. The saying of prayers, by the lips or by the machine; the giving of the body to be burned; the sounding of declarations of devotion; the bestowing of all our goods to feed the poor; pilgrimages, ceremonies, creeds, sacrifices—these are not the essence

of our religion; the essence of our religion is a hidden thing, unreachable to foot or hand; the life may not touch it, the eye may not see it; a hidden thing that lies away back in the recesses of being; an imperceptible, intangible, unweighable spirit,—it is love. No man, no church, no society, has our religion unless it has love. Whatever may be paraded before the world as our religion is not our religion unless at the center as its dominant and all-pervading force is love. Our religion is not material, it is spiritual: it is not a form, it is a motive.

The second characteristic of our religion is the nature of its spirituality. That nature is not destructive, but constructive; its element is not the hurtful, but the helpful; its source is not hate, but love.

Love is the strongest sentiment possible to the spirit of man. It is an upbuilding sentiment. True love to another is loyalty to another's highest interests. There cannot be love when there is intention to harm. The libertine who plots ruin to virtue is not a lover of man or woman; he is a hater: he is inflamed, not with the light of heaven, but with the fires of hell. Love always and everywhere seeks the advancement and benefit, the security and welfare of him for whom it is cherished. It is a life-giving stream, it is a flower of joy, it is a sunbeam brightening darkness. Where love comes, protection comes, and cheer comes, and benediction comes. To love is to bless.

What power there is in love! How the love of knowledge in Darwin sent him up and down the earth, through wind and wave, to ascertain all the facts possible to scientific research. How the love of country made Washington willing to risk property and life, and made Lincoln ready to bear burden and misunderstanding. How the love of Africa put Livingstone into the wilds of the forests and made him brave to investigate, and to die. How the love of a mother for her child causes her to pass sleepless nights without murmur as she bends over the couch of fever. Love! It has been the tremendous force of human development. It is the passion of passions. Love kept pure and true to its nature, has given the world its most glorious deeds of history. The awful wreckage caused by impure and untrue passion, the direct opposite to love, tells what occurs when an angel falls from loftiest heights to lowest deeps. Love is the actuating motive of the highest endeavor, love it is that has caused the wildness to blossom and the desert to become a garden.

This sublime sentiment, implanted in every life, a very part of that life as much as the capacity to breathe is a part of that life, has its perfect play only when it lays hold of every inner power—heart, mind, soul and strength—and uses them all in its helpful service. That there are different powers in our spiritual being we are conscious. There is a heart, the power that knows joy and grief, that greets the bright with gladness and grows heavy before the gloomy. When the

heart is strong, how brave we are, and when the heart is weak, how courage fails. The heart! Every one who has had a dear parent or has himself become a parent, every one who has faced dangers and passed through scenes of gladness knows that he has a heart. Then, too, there is a mind within us, an intellect, a cooler element than the heart, less emotional, more judicious, more inclined to weigh evidence. When that mind examines and approves, there comes conviction. The mind is different from the heart—the heart of the father loves his prodigal boy, it goes out to him in tenderness, but the mind of the father cannot love the prodigal because the father cannot approve the prodigal's life and deeds. When at last the boy becomes a changed man, becomes humble and penitent, then the mind of the father can love the boy because it approves of the boy. Besides heart and mind there is also a soul within us, an unseen something that gives us the capacity of spirit-fellowship with others—that makes us understand what we call "The Communion of Kindred Souls." It deals with friendship and all that has part in friendship. It is the highest element of our being, because as we stand before some mighty expression of God in nature, as the Grand Canyon of the Colorado, the soul becomes conscious that it is dealing with the sublime, the almighty. The soul is the most weighty element within us, and a man is never a saved man until his soul is made able to fellowship with the best of earth and of heaven. In addition to heart, mind and soul, there is still one other element within us, an element that is more an atmosphere about the heart, mind and soul than a distinct faculty—the element that adds strength, and vigor to heart, mind and soul. It is the glow, the fervor, the enthusiasm of our spiritual nature. We are just as convinced that there is such an atmosphere as we are convinced of our being; it expresses itself when the heart throbs with energy, when the mind is intense, when the spirit is inflamed, it is the strength, the enthusiasm of our being.

Our religion calls upon us to love God with all our heart, mind, soul and strength! What a demand upon love that is! It is an exhaustive demand, a demand that our whole spiritual nature with absolute loyalty devote itself to God!

The question immediately arises is God such an one that we can be true to our natures and thus love Him? It is a fact of history that no other god than the God and Father of our Lord Jesus Christ ever dared to make such a claim on man's love. We search the lists of divinities known among Assyrians, Egyptians, Grecians and Romans, and we do not find one divinity asking his worshipers to love him with all the heart and mind, and soul and enthusiasm. Every divinity known in the ancient world had infirmities: he was mean, or cruel or impure. Unreserved love for any one of them was a rational impossibility. Gods like Jupiter said, "Sacrifice to me;" and like Diana said, "Bring

me your gifts;" and like Bacchus said, "Drink to me." But as for asking for love, pure, true, absolute love, they never thought of such a thing. It would have been folly for Moloch, who desired parents to throw their infants into his arms of fire, to have asked parents to love him. They could not think of him and of his horrid worship without shrinking from him; yes, and without hating him. He was the enemy of their homes and of their family happiness.

Suppose a man who has known the god Bacchus for many years and has been his devoted worshiper until now he is a debauchee, with injured reputation, injured brain and injured character, is told that he should love Bacchus, what will he say? Love Bacchus, who has been the means of his disgrace, his sorrow and his ruin! He cannot do it. Bacchus is his foe, his smiling but relentless foe, who laughs over the misery he has wrought. Bacchus is a debased creature, beyond the power of reform, bent on harm.

Ask the young woman who has thrown herself at the feet of Cybele and has surrendered to Cybele's will until she has sacrificed all her instinctive ideas of purity and is shunned as an outcast, to love Cybele, to love the god that dragged her down from her pedestal of sanctity and placed her amid filth, to love her destroyer. She may still obey Cybele, she may go lower, lower as she obeys, but love Cybele! As well may you ask a mother to love the disease that takes from her her baby child, or the father to love the assassin that murders his son. No heathen gods, neither in olden times nor in modern times, aware of their wrong traits, can ever come to human beings and say: "Love us with all your heart, mind, soul and strength." They might as well tell the sun in the skies to move eastward. Man's true nature must be stultified to love the unlovable.

The fact may well impress us that one God, and only one, dares ask for man's unqualified love. Who is this God that thus differentiates Himself from all others and makes this unparalleled claim?

He is a God who takes a very large conception of man's heart, mind, soul and strength. Man may be indeed very frail beside His almighty and brief beside His lastingness. Man may be very ignorant beside His knowledge and very lacking beside His wholeness. but man can think thoughts as long as the being of God; man can pass judgment on God Himself; man can say "no" to the very will of Heaven's King, or man can acquiesce with that will and put himself into vital connection with the Eternal. God credits man with infinite longings; with limitless capacities; with desires far outreaching accomplishment. God knows that as man advances in achievement he advances in aspiration; that as the race moves forward its ethical ideas enlarge; that man is always cherishing higher and higher conceptions of the Perfect.

And still God does not hesitate to present Himself to man, this

wonderful man, and ask for his absolute and enthusiastic devotion. Who is He that He dares make this claim? He Himself answers our question and tells us that there are three ways in which He would be glad to be studied and judged. One is the way of His creation.

The word "God" in this summary is the word used when it is said: "In the beginning God created the heavens and the earth." That creation, comprehending physical nature and man, is a revelation of marvelous skill and goodness. God says, "Hold Me responsible for everything in the world excepting sin and its ravages. Look at the heavens, at the oceans, at the plants, at man untainted by sin, and see My power and My intelligence. Take the telescope and search into the limitless where I reign; take the microscope and penetrate into the infinitesimal where I am King." "I am willing," God says, "to have judgment passed on My might and skill in creation."

There is a second way in which God would have us see him. It is the way of His Providence.

The word "Lord" used in this summary is the word used when God, having pitied a people in Egyptian bondage, delivered them, and at Sinai as Redeemer, Jehovah, gave laws for man's place and power. Immediately, through that revelation, we behold His interest in the affairs of man and we catch a glimpse of His ethical character. We see Him as one who sympathizes with sorrow and need, as one who raises up a Moses; we see Him also through a Holy of Holies at the center of a life of a chosen people, a Holy of Holies because Jehovah of all the gods of earth is a spotless God, and we see Him through a "mercy seat" in that Holy of Holies, because Jehovah, of all the gods of earth, is a forgiving God, and we see this God, holy and forgiving, as man's friend and helper and protector and bountiful benefactor. God of Providence! He has a purpose, a purpose that cannot be thwarted, and it is of love. He has standards for man, and they always aim for man's best good and largest happiness. He has responsibilities for every one, that are always fitted to our frame, day and place. He never forgets His people. He is grieved in their grief; He is burdened with their burdens. He is a fair God, who shapes His every requirement of man according to the possibilities of the individual and the aid He Himself imparts.

God would have us see Himself also through the person of the historic Christ. He says, "While it is creation that shows My power, and Providence that shows My general character, it is Christ that shows My innermost being. As you see Christ healing humanity's diseases and relieving humanity's needs you see what My heart craves. As you hear Him speak of hope, and comfort, and friendship, and pardon, and eternal life, you hear what I wait to give. As you see Him giving Himself to the cross you see the last and greatest proof of My desire that all sin be overpowered and mankind brought into very

sonship with God. And then as you see Christ moving forward through the Christian centuries, in all the progress of human beneficence and human advance, you see what I long to do for men. I, the Almighty, pure and loving, would have this whole world blessed with peace and cheer and holiness. I would have slavery abolished, intemperance cured, cruelty banished, licentiousness blotted out. I would have liberty, and self-control, and kindness, and purity everywhere prevail. I would have hospitals, and courts of justice, and schools of knowledge, and congresses of peace. I would have beauty, and happiness, and holiness glorify the earth."

It is such a God we are asked to love. What shall be the expression of our love? It may be in words of adoration. There have been men who have studied the revelation of God and companioned in the spirit with God until the strongest words of affection they might use could not indicate too great devotion to Him. Xavier, the missionary to India, who labored unsparingly for all whom he could reach with his message, wrote:

"My God, I love Thee not because
I hope for heaven thereby;
Nor yet because who love Thee not
Must die eternally.
Not with the hope of gaining ought,
Not seeking a reward;
But as Thyself has loved me,
O, ever-living Lord,
E'en so I love Thee and will love
And in Thy praise will sing
Solely because Thou art my God,
And my Eternal King."

On the dim graves of the Catacombs beneath the streets of ancient Rome the worshipers often sketched a deer, a panting hart of the woods. It was as though they said, "As the hart panteth after the water brooks, so panteth my soul after Thee, O God. My soul is athirst for God. Yea, even for the living God. When shall I come and appear before God?" Augustine wrote, "O my God, Thou are my life, my joy, my holy, dear delight." Ignatius said to those who were putting him to death, "You may part my heart into a thousand pieces and on every one of them you will find in letters of gold the dear name of God." It is told of St. Thomas of Aquinas that when Christ appeared to him in a vision and said, "Thomas, you have written well of Me. What reward do you wish?" Thomas replied, "No other gift than Thyself, O God."

There have been men—and their number is legion—to whom God has been their all. The contemplation of Him has grown to be their absorbing thought. They could understand the legend of St. Theresa

and her dream. In her dream she saw an angel—an angel who had in one hand a curtain and in the other a shell of water. She inquired the purpose of the curtain and of the shell full of water. The angel replied that with the curtain he meant to hide the sight of heaven and with the water he meant to quench hell, that men seeing neither heaven nor hell might learn to love God for Himself alone. Surely Frederick Dennison Maurice had caught this same love of God when as he lay dying, and friends spoke to him of the termination of his work, he answered rejoicingly, "No, I am going where I may declare God forever."

Love for God may also find expression in deeds. To hate every evil thing, to battle down the wrongs of human life, to take one's stand upon the side of the brave, the true, the pure, the real—that is to love God. Many a man who never becomes capable of rapturous words concerning God, may scatter deeds of kindness, may bind up hearts that are broken, may relieve the distressed, and may be faithful at the post of duty that has been divinely assigned him—and he too is a lover of God. The deeds of beneficence inspired by this love are as widespread as the knowledge of God has gone. These deeds are the benisons of the centuries. Love toward God has been the source and spring of humanity's greatest advances.

Our religion, however, besides love toward God, has the additional element of love toward man. We are not asked to love man with all our heart, and mind, and soul, and strength, but we are asked to love man "as" we love ourselves. "As" refers to manner, not to degree. In the same manner that we love ourselves—the manner of desiring and seeking our real welfare, we are to love our fellowmen. This then is what our religion asks in its practical application toward our fellows—that we do everything within our power to help them, that we be patient with them, that we sympathize with them, that we labor for them, that we practice self-denial for them, and that we make their uplifting the end and object of our lives. What could be a higher practical expression of a religion than this—that we aim as definitely and as positively, as we aim at our individual self-advancement, at the advancement of others—that we pass by lines of demarcation, as of Jew and Samaritan, Greek and Barbarian, black and white, and we seek the comfort, the education, the elevation of man. How can a religion rise higher than the religion which sets before the spirit devotion to the highest ideal of character and before the conduct devotion to the highest welfare of society. There never has been a religion comparable to ours; there never can be a religion superior to ours. Man cannot imagine a nobler Being than God, man cannot imagine a nobler purpose than the perfect redemption of the human race.

And is this our religion? May we stand on the housetops and proclaim it as our religion? We may. We may shout our joy in it:

we may sound its praises far as voice will carry: we may go forth to every obligation of life cheered and ennobled by it. Most wonderfully it directs the attention of our inner being first to God and then to man. It lifts before us one who created all that we see and handle. One who Himself unites absolute holiness and infinite pity. One who loves needy humanity with a love that makes the costliest sacrifice even His infinite nature can provide none too costly for a world's salvation. It says, "First of all in life, study this God, study Him until His beauty becomes clear to you, study Him until you feel that His ideals must be your ideals and His wishes must be your wishes." Then it says, "With those wishes of God for you and for others flowing through your being, do you devote yourself to the welfare of your brothers." It argues that the more we love God the more we shall love man, the more we gaze upon God the more we shall be made like God, and being like Him the more we shall love man, even as Christ, God's supreme representative, loved man—and in that love died for man.

What is to be the future of this religion? A future evermore glorious. It sometimes seems as though we had not understood what our religion is. We have been in danger of magnifying some adjunct, supposed by us to be necessary to its preservation, while we have forgotten that its essence is invulnerable and eternal. Like Uzzah we have put out our hand to stay the ark, when God Himself will take care of the ark.

It is impossible for any thoughtful man to imagine that this religion can ever die. So long as man lasts, here is the ultimate ideal of his being—the ultimate ideal of his usefulness and of his happiness—the ultimate ideal of the development of the individual and of the race.

Let learning run as fast as it can in the ways of investigation. Let all the principles and all the facts of every branch of knowledge be learned. Let the lamp of study burn long into the night, let the laboratories press their searches farther and still farther, let all the problems of individuals, homes, cities and nations be scrutinized in every detail—God will delight in every forward movement that uncovers Him—for God cannot be uncovered before the sight of normal men without being made wonderful, beautiful, adorable.

Oh for a tongue to speak His praise! Every voice within us, voice of heart, voice of mind, voice of soul and voice of strength, cry out:

"We praise Thee, O God, we acknowledge Thee to be the Lord.
All the earth doth worship Thee, the Father everlasting,
And we worship Thy name ever, world without end."

MONDAY, OCTOBER 16
DEDICATION OF THE WOMAN'S BUILDING
PROGRAM

EXERCISES IN THE WOMAN'S GYMNASIUM

The President of the Board of Trustees and the President of the University Presiding

Trio: Lift Thine Eyes (Elijah), *Mendelssohn*; Mrs. Breneman, Miss Busey, Miss Lange.

Address: Transferring the Building to the Trustees; Acting Dean James M. White, of the College of Engineering, representing the Architects.

Response and Address: Committing the Building to the Immediate Care of the President of the University; The President of the Board of Trustees.

Response: The President of the University.

Music: Robin Adair, *Dudley Buck*; The University of Illinois Woman's Glee Club.

Address of Dedication: The Need of the Day: a Correlated Democratic Education; President Lilian Wyckoff Johnson, of the Western College for Women.

Prayer of Dedication: The Reverend Frank Wakeley Gunsaulus, President of Armour Institute.

Trio: The Smiling Morn, *Handel*; Mrs. Breneman, Miss Busey, Miss Lange.

Reception in the Club Rooms, and Inspection of the Building.

ADDRESS TRANSFERRING THE BUILDING TO THE TRUSTEES

JAMES M. WHITE, B.S.
Dean of the College of Engineering

This building which we today formally occupy for the first time was designed by McKim, Mead and White of New York City. There stand to their credit many beautiful buildings, two of which, the Boston public library and the Columbia University library, take rank with the ten finest architectural monuments in this country. They designed all of the buildings at Columbia University and at the universities of Virginia and New York and have buildings on many other campuses. Among the other noted structures which they have erected are the New York Herald building, Madison Square Garden, the Rhode Island state capitol, the agricultural and New York state

buildings at the World's Columbian Exposition, and the Washington arch.

Mr. Charles Follen McKim was a student at Harvard Scientific School and the Ecole des Beaux Arts. Beginning practice in 1872, he was joined in partnership by William R. Mead in 1877 and by Stanford White in 1879. In 1903 he was awarded the royal gold medal by King Edward for the promotion of architecture. Mr. McKim was president of the American Institute of Architects at the time he accepted the commission to design this building.

Mr. William Rutherford Mead, a brother of Larkin G. Mead, the sculptor, was graduated at Amherst College in 1867, and received the degree of LL.D. in 1902. He studied architecture with Russell Sturges, Jr., of New York, and for two years abroad.

Mr. Stanford White was educated at the University of New York, but received his architectural training with Charles D. Gambrill and H. H. Richardson, being the chief assistant of the latter in the construction of Trinity church, Boston. He has also traveled and studied extensively in Europe.

Of no other architectural firm in this country can so much be said in as few words.

Their success has been due in no small measure to their appreciation of the fact that the architecture of a building should always be in harmony with its purpose. Greek architecture attained its climax in the temple, Gothic and Romanesque in the cathedral, and Renaissance in the palace. Having been conceived and perfected with reference to a particular class of building, these styles are therefore difficult of adaptation to modern buildings, and yet most laymen and many architects are wholly lacking in their appreciation of the appropriate places in which each of the several historic styles may be used.

This building is in the style termed colonial, but more exactly speaking it is the Georgian style, which was developed in England during the reign of the Georges, when the people were striving to develop domestic pursuits,—the arts of peace instead of war. President Draper appreciated the appropriateness of employing this style, and because he knew that McKim, Mead and White were pre-eminent in their mastery of it, he exerted his influence to persuade them to accept the commission to design the building. The plan has been logically developed and the exterior so designed as to accent the particular features of the plan.

The building has been erected without accident and without discord between the several contractors and the University authorities. Therefore, Mr. President, I can, on behalf of the architects, present it to you with the assurance that it has been completed without any incident at variance with the ideals for which we expect the building to stand.

ADDRESS COMMITTING THE BUILDING TO THE CARE OF THE PRESIDENT

THE HONORABLE SAMUEL A. BULLARD
President of the Board of Trustees

It affords me pleasure today, on behalf of the Board of Trustees, to accept this building and to have the assurance that the work laid out for the builders has been completed. From the time a building of this importance is commenced till the time it is finished, a long period must necessarily intervene. This time is occupied with both mental and physical activity, for the plans must be perfected and the materials assembled out of which the building is to be made, and the artisans must go patiently forward with their work through all the stages from the first breaking of earth to the final stroke of the painter's brush. The building is now completed and, speaking for the Board of Trustees, we today accept it.

In the beginning of this movement the President and Trustees recognized the need of providing for the young women of the University increased advantages in physical culture and social life peculiarly fitted to them as women. I am not sure but that this need was first voiced by the mothers of the young women of the State, our great constituents, and was only revoiced by the President and the Board. In official action the need was reduced to a definite statement and was carried to the Legislature with the request that the funds necessary to construct a building for this purpose be provided. This was done with success and the forty-third General Assembly of Illinois made the necessary appropriation.

The needs which this building was to assist in fulfilling were now more definitely formulated, and the character and extent of the functions to be served by it, and the relative sizes of the several sections of the building were now accurately determined. These conclusions were then submitted to the architects for their study and advice as to how they could best be carried into effect in the form of a graceful and beautiful building to be erected upon our already attractive campus. How well they succeeded in their part of this work is apparent to all here present and there is no need of an eulogium from me.

However, I could not rightly perform this pleasant duty today without congratulating ourselves and recognizing our obligations to our architects, Messrs. McKim, Mead and White, and commanding their eminent abilities, which have been so admirably displayed in this beautiful structure. And further, I desire to say that the happy result of a great enterprise like this building cannot be attained without constant, conscientious and capable work of all the builders charged with its construction. And I am pleased to commend all of those artisans who have with a true spirit of art wrought out and left

in this building parts showing their own individuality. We delight to honor him whose hands have wrought with delicate skill that in which his heart has found great joy.

And now that the building is completed our minds naturally turn to the uses we are intending to make of it. It is not consistent in art that a thing be simply beautiful. It must have more than beauty in order to be good art. It must move man toward better things. The Greeks had the most beautiful architecture of the world, but it did not inspire them to live better. The people were content to dwell in even ugly and ill-shaped houses. Their sculpture was equally beautiful, and it charmed men and women to a nobler physical life. There was a firm step, a graceful carriage, a princely bearing, a calm and dignity emanating from its graces which it enthused the people to likewise possess. Hence in art the sculpture of the Greeks was away and beyond their architecture.

We trust that in this building, this stone and brick and wood and metal are not piled up here in order to simply impress the students with the beautiful. We want this building to represent true art by being in itself beautiful, and by nursing into stalwart strength within the young women around the University the high purpose of better living, better doing and better being. This building is the concrete expression of this high sentiment. One section of it is devoted to instruction in the physical growth and nourishment of the human body. This knowledge is the basis of all excellent living. The body must be properly provided with the necessary quantities of pure and wholesome foods, or neither the body nor the mind will be able to perform its highest functions, and individuals will be prohibited from attaining the highest standard of physical life. The members of the human family must become well-fed animals before they may enjoy the high position which every one has the right to hope for and expect. Another part of this building is devoted to instruction in the physical exercise of the body. The bodies of women, as of men, on whom rest the responsibilities of life, must necessarily be in constant activity. Ease in doing encourages ability to do, and the ability develops desire to do, and desire to do is the fore-runner of determination to do. So the knowledge and practice of physical exercise of the body encourages better doing. And yet another part of this building is devoted to the exercise of the social life. Our social lives prove more than any other one thing what we are. They also more than we can tell operate to make us what we are. No kind act performed but will leave the performer kinder in heart. No word of cheer is spoken but leaves the speaker with a more sunny nature. No loving service is rendered but makes the servant possess more nearly the true spirit of the Master. As we think and do so we are. Social culture therefore induces not a little to the welfare of the race. In its exercise we learn and practice

the amenities which make the roughness of life endurable, and the joys more thrilling. Living and doing and being, these three,—but the greatest of these is being.

These incomplete statements are short, but they exhibit the purpose which inaugurated the movement that has culminated thus far in erecting this handsome structure and fitting it with all the apparatus and furnishings necessary to amply fulfill this purpose. The building is completed, its equipment provided, and all these physical things are ready. The work proposed must be done. The people of this commonwealth cannot do it. The Trustees of the University in whose hands the people have committed this charge cannot perform it. Other hands and hearts must be applied to the task, hands that are strong and hearts that are confident. The Trustees therefore look to the women instructors of the University, whose duties wholly or in part lie in the realm covered by the original purpose to provide this building and equipment, as the ones to take charge of these things and conduct this work.

Into your hands, the lady members of the Faculty, the Trustees commit not only this building, delightful as it is in all its appointments, but the superlative duty of leading the young women of this University to attain the highest ideals in living, doing and being. This is a lofty task which we ask of you. We ask it because we have confidence in your abilities and we feel sure that you will enter into your work with love and devotion which will dare and sacrifice, and further because the work is a great one and it must be done. It is an activity worthy of your abilities. We would have you teach our young women the laws of existence and perpetuity, and the necessity of activity, endurance, courage, love and sacrifice in order to obtain that most exalted existence of which the human race is worthy. In other words, we want you to join in that Godlike creation, the making of a woman a woman. We commend this duty to you and give you our blessing in it. I am persuaded that this duty will be done well.

RESPONSE OF ACCEPTANCE

EDMUND J. JAMES, PH.D., LL.D.
President of the University

It is a unique building we are here dedicating, the like of which, so far as I know, is not to be found in any other American university.

The erection and dedication of such a building as this signifies one or two important things for the life of the University. It means in the first place that the University of Illinois is committed to the policy of coeducation, in the fullest and completest sense of that term. It means that whatever other institutions may do in the way of segregating the women in the process of education or however they may

limit their numbers, either absolutely or by a percentual gradation, the University of Illinois will admit all the women of this commonwealth, who, being properly prepared for University work, desire the facilities of this institution.

This building means, however, still another and a very important thing for the future of college women in this State. It means that the State of Illinois and the people of Illinois are still in many respects old fashioned. They believe their girls should be treated in a different and better way than their boys, if a choice must be made in the treatment of the two. It means that they look upon the girls as in a peculiar sense their precious possessions, and that whatever concerns their training and their life as college students comes very close to their hearts. It means that parents, after all, expect a different treatment from the University for their girls than that with which they are satisfied for their boys. It means that there is a difference even in this social and academic way which is to be recognized in the very organization and life of the institution. It means that they do wish their daughters looked after in a different way and to a different extent from that with which they are satisfied, per force, in the case of their sons. This is perhaps old fashioned and not in accordance with the idea of the new woman, but it is in accordance with the sound and sensible feeling of the mothers and fathers of this great State.

It means, furthermore, that the time has come when we are finally willing to face the proposition that the higher education of women is to be, in many respects, of a different type from the higher education of men. When women first made their demand upon the institutions of the country to be admitted to the facilities of higher education, they were not satisfied with anything less than exactly the same privileges which the men had, and they did not care for anything more. Offering them an opportunity to pursue other courses of study than those pursued by the men and by other methods, seemed to them an insult and an attempt to sidetrack them in their efforts to obtain a higher education. It was naturally spurned with indignation, but today this attitude in the realm of higher education for women is passing away, and the women themselves are beginning to raise the question whether pursuing the same studies in the same order and by the same methods as the men is really the higher education for which they have been longing, and which they have been determined to have.

This building is intended to house three departments of special significance and importance for women. First the gymnasium. I need not dwell upon this. It is the ordinary gymnasium with the ordinary facilities for physical culture which our modern society demands for its college women, and I regret to say that while this portion of the building is a beautiful structure, eminently adapted to its purpose, it

is after all not large enough for the great number of young ladies who have already entered the University and are entitled to its use. The Legislature of the State and the Trustees of the University have again made the mistake which we Western people seem almost sure to make in erecting our institutions, namely, not to plan for as many students as, before the buildings are finished, crowd into their halls.

But this building houses, in the second place, a social club house for the women of the University, and this marks a new era in the social life of the women of this institution.

We have developed here at the University of Illinois, to quite an astonishing extent, the so-called sorority or sisterhood, a semi-secret association of young women, limited in numbers so that each member may really become an intimate friend and companion of every other. It has very many advantages. It has been, under conditions prevailing here, almost a necessity. If its abuses and extravagances can be abolished, it will remain a permanent element of great and beneficent influence in the life of the University. But all such organizations have one drawback which is involved in their very essence; namely, the limitation of the association, and the limitation of the intercourse to a comparatively small number of people who have been selected by a more or less artificial process. The very limitation necessary to the intimacy which is the fundamental advantage of the sorority shuts off the member from that wider intercourse with the large number of college women from which a better selection might oftentimes be made of the intimacies which would be a permanent value and help to one's moral and intellectual development. It is believed that this social club house, the privileges of which are open to every woman in the University by virtue of the fact that she is a member of the University, will go far to supplementing the defects of the sorority system, will give an opportunity for the women in different sororities, and for the women in no sorority at all, to come together more intimately upon the common ground of University membership, that ground which after all is more fundamental and should be more vital than any scheme of sororities or fraternities. So far as I know this is the first building of this sort to be erected at any American university. I cannot help but believe that the example of Illinois in this respect will be followed ere long by many other institutions.

This structure also houses, in the third place, the department of domestic science. This is the department referred to above, which is recognizing the peculiar needs of women in the field of higher education. The University of Illinois was the first university in the country to establish a chair in the department of domestic science. This step was taken more than twenty years ago, and was one of the many evidences of the insight and outlook of that first President of this institution, who was one of the greatest educational forces ever at

work in this commonwealth, Dr. John M. Gregory. But the Doctor saw what was ultimately destined to come rather than what was at that time feasible; for twenty years ago the women of this country who were seeking the higher education had not risen to the high view that higher education for women should be in many respects entirely different from higher education for men. The girls of that time literally ridiculed the proposition out of existence. They refused to consider that higher education could in any way be associated with the art of home-making,—that there was anything in that department which people could find at the university. They insisted that they came up to the university for calculus and astronomy and geology, and if they were to study chemistry it was certainly not to be the chemistry of foods; and if it was architecture it was not to be the architecture of the home; if it was business management it was not to be of the enterprises which the women could and do manage successfully, but those which, up to the present, they are only longing to manage. Today, fortunately for this State, their attitude is entirely different, and the number of women who are taking up this course of study, and pursuing it by the methods in the spirit of the higher education, is rapidly increasing.

I think the University of Illinois may congratulate itself upon the fact that whereas the women's colleges almost without exception have refused to take up these courses and provide for them in the same liberal way in which they provide for courses in Latin and Greek, in French and German, this institution has pointed the way, not only to women's colleges, but to coeducational institutions in general, by which a vast addition may be made to the facilities of higher education for women.

THE NEED OF THE DAY: A CORRELATED AND DEMOCRATIC EDUCATION

LILIAN WYCKOFF JOHNSON, PH.D.
President of the Western College for Women

Every true teacher, like the greatest Teacher of all, has a mission to fulfill—a message to proclaim—and in his eagerness he proclaims the message, however unwilling the ears, and rides his hobby regardless of the toes of his friends. You can, therefore, imagine my pleasure when I was invited to speak to you of that which lies nearest to my own heart, for I see before me here in this beautiful new Woman's Building a concrete expression of my pet ideas. I congratulate the University of Illinois on the long step forward which it has taken in the education for women by the erection of this building. I congratulate it also upon the inauguration of a president with such clear-cut and progressive ideas of education.

I have read with much interest President James' exposition of his ideas of what a great university should be, as expressed in his recent article in the *Review of Reviews*. Surely he is right in urging that the university in all of its lines of work should be closely correlated with life and that its dominant note should be service to the state and to the community. Is he not right also in thinking that the university must help to solve the problem of a system of education for the state? Growing up spasmodically as they have, our various institutions are unrelated to one another and this independence, while making in part for strength, is, however, a great weakness, not only because of the duplication of the work, but also because of the gaps which it leaves in a progressive course of education. It is because we feel the need of a system of education that we hail with delight the organization of the General Education board and the recent gift of Mr. John D. Rockefeller to that board of ten million dollars, with a declared purpose that the income should be used to further the organization of a system of education. It is only by some such disinterested body with sufficient means at its command that a system truly related in all its parts can be evolved, and those institutions who are anxious to see in this country a system of education which, from the kindergarten through the university, is not only closely related in all its parts, but also is in every phase related to life and to the needs of the present day, should rally heartily to the support of this board and should urge that not only ten million dollars, but hundreds of millions should be intrusted to it for this great work.

Have we not been slow to recognize that the true keynote of education is service and that the highest culture can result only from an education in which service is the keynote? In spite of our own progress in all that makes for culture, the culture of the Greeks is still our ideal; but was not this an outgrowth of the idea of service? When we examine their system of education we find that every phase of it was ordered with the idea of service to the gods or to the state. Their physical training was to prepare good soldiers and sailors; every work of art had behind it some idea of service to the gods, or to the state; even their oratory and drama had underneath them the idea of service. When we turn to the education of the Middle Ages we find that the schools and the universities were organized to prepare men for the service of the church. Later as the communes grew, the universities prepared men for law and for medicine. This system of education, worked out in order to prepare men for great professions, came to be more and more thought of as the only education which could produce a cultured man; so that we have adopted it not only for our universities and colleges, but have passed it down to our high schools and secondary schools, until our whole scheme of education is moulded upon a system which was originally devised to fit men for service in the learned

professions. But with the coming in of the new sciences and the new professions, is such a system any longer adequate? Do we not need a much broader idea of the service which the present day demands of us, and should not our whole system of education be related to this diversified life and each part of it closely correlated with every other part, so that from the kindergarten to the university, while the one dominant note is service, the interpretation of the term will yet be so broad as to include every phase of modern agricultural, industrial and commercial life?

If this be true of education in general, what shall we say of the education of women in particular? If service is to be the keynote, for what should our young women be educated? Will not by far the greatest number of them be home-makers; and even if many of them enter the professions or business, will they not add the profession of home-making also? If this be true should not our colleges and universities take cognizance of this and see to it that the courses of study are such as to fit a woman for this line of work? This does not mean an education any less thorough and scientific than that which will be given to men. We have been slow to discover the necessity of a thoroughly scientific training for the farmer and the mechanic; we are slower still in discovering this for the home-maker, and yet it is into her hands that are entrusted the very issues of life. Having learned that brain and spirit are absolutely dependent for a proper functioning upon the body, should we not see to it that those who have the chief care of ministering to the body should understand the basic principles of this work? I do not mean that I would limit the education of a woman to the one profession of home-making. If God has given her a special talent, be it even that of bridge-building, why then teach her to build bridges; and if she can build them better than any one else, there will be a place and a work for her. But need she be any less the woman because of this? Was not Frances Willard right when she said, "Womanliness first of all,—after that what you will"? Have we women not at least come to a realization that what we wish is an education as thorough and as scientific as that of the men, but not necessarily along the same lines? We crave the best preparation for the service which our day and generation will demand of us, but will not that service for most of us be something different from what the world asks of a man?

It is because I believe this that I congratulate you, the young women students of the University of Illinois, upon the gift of this beautiful building, where you will have the opportunities not only to develop yourselves physically, but to pursue courses in household economics and to secure social training. These opportunities in the physical, practical and social lines, in addition to your splendid opportunities intellectually and the spiritual opportunities which, I

understand, are offered through the Young Woman's Christian Association, will give you, if rightly used, the all-round education which the world demands of you in this twentieth century. Let me earnestly entreat you not to neglect the social training which this beautiful building offers you, and do not make the mistake of confusing social opportunities with social training. The former every coeducational institution offers in large measure, sometimes, perhaps, too large. By social training is not meant a course in manners, but the training which enables one to meet his fellowmen with ease and so to draw from their best. Let these rooms be your laboratory and your teachers the most cultivated Christian women whom you can find in this community. Without such social training you are as seriously handicapped as you would be if one of your limbs were shortened; with it you can not only enrich your own life but the lives of others.

Again I congratulate you and assure you that from afar we shall watch with great interest your development into women, intellectual and womanly, strong and sweet, cultured and Christian;—women ready for the work that God is waiting to entrust to you.

UNIVERSITY ADDRESS, 8 P. M.

THE HEROISM OF SCHOLARSHIP

REV. F. W. GUNSAULUS, D.D.

President of Armour Institute

[This address is withheld from publication.]

TUESDAY, OCTOBER 17

STATE AND NATION DAY

EXERCISES IN THE ARMORY, 9:00 A.M.

PROGRAM

The Honorable Shelby M. Cullom, United States Senator from Illinois Presiding

Music: The University of Illinois Men's Glee Club.

Addresses: The State and Education: Honorable Richard J. Barr, Mayor of Joliet. Honorable James Hamilton Lewis, Corporation Counsel of the City of Chicago, representing the Mayor of Chicago. Honorable Lawrence Y. Sherman, Lieutenant-Governor of Illinois.

Music: The University of Illinois Men's Glee Club.

THE RELATION OF THE UNIVERSITY TO THE LOCALITY

THE HONORABLE RICHARD J. BARR
Mayor of Joliet

The subject assigned to me, the Relation of the University to the Locality, is one that may be discussed from many points of view. As localities make up the state and the states the nation, an exhaustive discussion of this subject would cover the whole field of university work. The university and the higher education that it furnishes must prove their value to the locality, if they expect to receive generous public support.

It is generally conceded that a well-trained mind makes one better fitted to discharge whatever duties he may assume; that it makes him a better citizen, better able to serve himself and others; in short, makes him a better man; and perhaps the good that comes from higher education, that cannot be measured in money, is of most importance; nevertheless I will occupy the few minutes allotted me in discussing its value from a point of view that may appear to be largely material.

With the development of our country has come the rapid growth of villages, towns and cities, and with them the public utilities that have become so necessary in every locality of dense population. And this concentration of our people seems to have just begun. Each year marks the formation of innumerable new villages, towns and cities and the rapid growth in population of many of the old ones.

With the formation of towns comes the laying out and building of streets, lots and blocks; the construction of sewers and water mains; the establishment of water supplies from artesian wells and from natural streams and lakes with their filtration plants and pumping systems; the erection of lighting plants with the installation of distributing pole and pipe lines; the equipment of street departments with their street cleaning forces; of health departments with their garbage crematories and reduction plants; of fire and police departments with their systems of electrical connections without which they are useless; of plumbing departments that are so essential to the health of the occupants of every house. And each of these departments can be properly handled only by men who have received a technical training in the college or university.

The importance to the locality or municipality of trained men in these departments is well illustrated by the duties that devolve upon the city engineer.

Very often the width of the streets is determined long before the village or town, which afterwards becomes a city, has a city engineer, but as soon as street improvements begin his services are called for and he is required to establish sidewalk and curb grades that property owners may build and improve their property with reference to them,

and as nearly every street is partially built up before the sidewalks and curbs are put in, and as this work is usually done a block or so at a time, it is essential that these grades be given so that they will conform to grades already established in different parts of the town and also to those to be established as the city grows and expands.

In nearly every city we find irregular sidewalk grades. We also find that these walks are being reduced to a uniform grade with the result that rows of buildings erected with reference to the sidewalk grade, given by some incompetent engineer, have to be lowered or raised at great expense to the owner.

In building an asphalt street thirty-six feet wide, which is the width of many residence streets, the cost is five dollars per running foot, so that the owner of a lot sixty-six feet wide would be assessed three hundred and thirty dollars. The construction of this street is of considerable importance to the property owners; in fact, there are many streets in cities of Illinois now in process of construction where this assessment amounts to all but the value of the property itself. This being true, it is very essential that when this street is completed it shall be of a lasting character.

If this street is properly built, it will last for ten, fifteen or twenty years without resurfacing and with little repair, while on the other hand if it is built from an improper quality of material or of material mixed in improper proportions, it will go to pieces at the end of two years and the large sum of money expended for its construction is lost, and this is largely true even though you have a guarantee from the company that constructed it; for if your street gets out of repair, it takes time for the company to get its plants on the ground and make the necessary repairs, if it is disposed, and if it is not so disposed you may bring an action on its bond and thus involve the city in a first-class law suit, which is usually very unsatisfactory to both parties.

The importance of a competent engineering department to a municipality, I believe, only fairly illustrates the importance of having competent heads to every other department of the city government. The necessity of having competent men to pass upon the quantity and quality of light purchased from private corporations and the necessity of having competent men to operate gas and electric lighting plants where the cities are the owners of them, are of the greatest importance to the locality. And what is true of these departments is also true in a more or less degree of every other public utility, for all of them are either owned or supported by the inhabitants of the community.

Each one of these utilities requires not only successful men to properly handle them, but also laboratories of various kinds where tests can be made. These laboratories are usually not owned in the locality, and thus it seems to me that the state university is the

proper place to have these tests made; its laboratories should be made use of by the people of every locality.

This laboratory work of the university becomes valuable not only to the people of the municipality, but to the people of every locality. For during the last few years our own State University has done much, not only to furnish trained men for our various municipalities and laboratories for the testing of material used in cities, but has also done much to help the people of the farming communities in the tests and discoveries made along agricultural lines. It has done much good by sending in pamphlet form the results of these investigations into the homes of the farmers, thus enabling them to produce not only a greater yield, but a better quality of the product of the soil. By the use of the laboratories of the university, the people of the locality may know the best uses for their soil. The establishment here of a school of ceramics will enable a community to utilize its clays, to establish tile, brick and pottery factories, where before it was not known that suitable clays existed. The farmer is also advised of the various diseases and of insects that destroy vegetables and fruits and the best methods of eradicating them.

In fact, the progress of the locality in all directions is and may be largely influenced by the help it obtains from the university.

Mr. Carnegie at the opening of the laboratory of engineering which he gave to the Stevens Institute in Hoboken, New Jersey, said:

"My trifling gift to Stevens was not a thing of chance. I know what the institute is doing, for in all my experience in manufacturing I have learned this thing above all others; bring brains and knowledge to your work, even in the smallest detail. I always follow that rule. I believe that I was the first man who employed a chemist at a blast furnace in the United States. And mind you, he had to be made in Germany. We paid him the enormous salary of fifteen hundred dollars a year. But then that is as much as I got as general manager of the Pennsylvania Railroad.

"Well, with the aid of this chemist alone, we were soon able to make money out of slag, scale, etc., that other manufacturers were throwing away. Then we found that there was ore that was far better than the ore which was being generally used then, and which had a big name. Other manufacturers were buying ore by name; we got richer and cheaper ore which had no name.

"But that is all past. The technical school has given to this country a class of young men, the like of which are seen nowhere else in the world. I had a number of famous English iron and steel men at dinner not long ago. When one of them arose to drink to my health, he said, 'Mr. Carnegie, it is not your superior ores nor your great mills that impress me most, but the class of young men you have in iron industry here. We have no corresponding class in England.' "

The University does much for the locality, not alone in training boys who become skilled men, but also in training girls who become the women of the community.

The influence of the university is felt by the locality in many ways, not alone through her technical men, but through her professional and business men,—an influence that is greater than is realized by many of our people. These are the men who have to do with our health, who govern and direct the public improvements, who plan and superintend the waterworks, the lighting and heating plants, the transportation facilities, the public playgrounds, parks, streets and the manifold municipal activities in which every up-to-date city is engaged. The locality depends upon the chemist and bacteriologist to tell its people of the purity of the water and its possible pollution, to furnish us with examination of the foods we consume and the milk and beverages that we drink, to give us reports of the fertility and condition of the soil and the best methods of destroying noxious growths and insects. To the engineer in the various ramifications of his profession as municipal, hydraulic, sanitary, bridge, railroad, mechanical and electrical engineer is the locality indebted not only for the rapid strides in human progress that have been made in the last twenty-five years, but for the multitudinous trifles of comfort and luxury which affect the well being and happiness of each and every member of a locality.

The university confers benefits upon the locality through the medium of her graduates and also through her professors, who are in almost daily consultation with, and who are advising the officials of municipalities in the solution of the many problems of civic life. Thus the university with her laboratories, open to the public generally for the testing of waters, soils and materials for construction, and offering advice based on the results of such examination, becomes a direct factor in the progress of every municipality and locality.

ADDRESS

THE HONORABLE JAMES HAMILTON LEWIS
Corporation Counsel of the City of Chicago

I come to bring you the felicitations and encouragement of the most representative American city of the world—Imperial Chicago. Yet in my song of gladness I sound a note of sadness.

The great city is the graveyard of literary learning. The refinement of letters is lost in the heaps and debris of the mill and the factory. The song of beauty is smothered in the shriek of the whistle and the clang of the bells. The speeding racer upon the trade track is wrapt and absorbed in the push and shove for place as he plunges

to the wire for the prize of gold. His is the glory of wealth and the grandeur of material achievement. To him there is no beauty in the crown of laurels, no victory in the wreath of bay. He forgets where it was "Ilissus rolled his whispering streams," or from where "Parnassus fount ran the fluids of perfect life." His is the magnificence of the constructor who builds with the hands. He leaves to the dreamer the castle built with the beauty of a thought and polished in the perfume of an ecstasy. Still, the city and the college are wedded in the bond of mutual dependence—one and inseparable. The genius which uplifts from the earth to the clouds the steeped wonders of architecture was born in the breath of the educated life. The master of the mysteries of manufacture brewed his secrets from the alchemy of the college laboratory. The financier, whose manipulations of the money changes bewilder the mind and startle the body into revolutions and rebellion, wooed his magic art from the winding college labyrinth. The profound man of civic accomplishment and material development borrowed his guide of action and chart of achievement from the scrolls of learning and the parchment of college records. He may have been unconscious of the mother of his attributes, but was no less indebted to education as the source and birthplace of his profound creations.

It has become something of a popular theme to indulge the expression that a college education is no longer necessary to a business man's welfare, nor an advantage to the man of affairs who destines the course of great cities. Lately two eminent projectors of the success of the material world have enunciated these views. One, a distinguished and successful manufacturer in the city of Chicago, has written a book to prove that an education is not necessary to a manufacturer's success; the other, a famous iron master, who has built an armor plate for our national navy, has repeated this doctrine in public address. Let it be understood this is not new. As we contemplate these views, it is of passing interest to recall that Seneca has occasion to tell us something of two characters, the same who have lately been brought to our attention by the author of *Quo Vadis*,—Seneca gives us the dialogue between Petronius and Vicinius. Note it. Petronius says: "There goes (referring to one who has lived in the world of letters) a scholar. He has been to the colleges in Greece and has not land enough to bury himself. College education, I say, is a great disadvantage to business. Behold me! There is not a bird which, flying all day, can go beyond the lands which I own from this point. Ah, I say, land for me; learning for him."

It appears to me as an expression of folly for one to claim that success in any form of scientific achievement or material development is not necessarily aided, if not born, from education. As well might one who dips water from a vessel near by, to put into a boiler for the

purpose of generating steam, announce that it was unnecessary to know anything concerning the manner of drawing water, unconscious in such statement that if there had not been those before him who had drawn the water, he would not have it to convert into steam and power. So, too, had there not been the forerunners with knowledge and science to present the material or the thought to the practical man for its adoption and use, he would not have so moulded or shaped it so as to have produced its material results or financial reward. There is nothing of today that is not of the yesterday in some form or shape. Patrick Henry stated the truth when saying "We have no lamp to guide our feet but history; we can only judge the future by the past." So, too, the man who accomplishes today, does so by some of the fruits of yesterday, though he may be unconscious that these have been produced from academic science and college culture. It is a display of indifference to all that goes to establish high moral standards and secure safe thought in the world of affairs for one to assert that any great form of success can be attained without the refinements of learning.

The city must turn to the college as the fount from which it must drink the inspiration of thought or influence. It is the school of higher education that in this day is more needed than at any time in the history of our Republic. Indeed, if there were nothing else to be taught, the municipalities and the crowded thoroughfares of commerce might learn once again the early creeds which did so much to build our nation in honor and hold it to the anchorage of truth and justice. When from the halls of our national legislation there comes the evidence of public pollution, when United States senators sell their high offices for gain, pervert their public place for private fortune, repudiate and betray the trust reposed in them, that they may serve those who steal the substance of the poor and profit by the destruction of honor—in a word, when men in high places unblushingly confess the open appropriation to themselves of the trust funds placed in their hands for the preservation of helpless widows and homeless children, and boast with the air of bravado and indifference of having consummated the scheme of debauching the public ballot, purchasing legislatures and juggling the judiciary of the nation, to the sole object and end of enhancing private fortune, that such may be expended to accommodate their vulgar practices and gross indulgences and to pay for Bacchanalian revels for the social degenerates who occupy official positions and whose highest aspiration is to ape the fool who performed at the feast of Belshazzar,—surely the school, the college and university could at least tender to the great cities and their clustering "corners" of finance and trade that lesson taught once from a mother's knee, bringing forth the law which came from Sinai saying, "Thou shalt not steal," or that other precept proclaimed by the Apostle of

Peace from the mount—"Love thy neighbor as thyself." These two laws can at least be once again tendered by the university as the mother of learning, the monument of truth and the guide to justice. The city, therefore, may turn again to the groves of the university ground to catch the spirit of truth and to the crypts of the university walls for the book of knowledge. From these she may drink deep, to the end that justice may be justified of her children, and that honor and truth may still remain the dearest heritage man can transmit to the children. It is to the fulfillment of this dream that Chicago brings her hopes, her wishes and her congratulations to you upon this auspicious day.

We are told that in the time of Hadrian, a tyrant emperor of Rome, he condemned to death an old man for the offense of criticising the corrupt state of the empire. The old man was sentenced to starve to death. He was imprisoned in a close cell, with none permitted to see him but the watching guard and his daughter. It was observed that the hapless prisoner survived and did not perish. The incident attracted attention, as no food had been allowed to the cell. Upon investigation it was detected that the daughter, who had lately been a mother, was feeding her famished father from the springs of her maternal bosom. The incident could well have touched the emperor and justify the pardon that followed. So, too, might we apply the illustration—that if the Republic has become decrepit in honor, is famishing in its patriotism, surely we may take lesson from the classic incident as given us by the historian and perpetuated in canvas by the painter, and turning to the university point to her as the daughter of the state from whose exuberant bosom our government may still draw the fluid of patriotism and honor, and survive, to the happiness of her people and the perpetual glory of the Republic.

ADDRESS

THE HONORABLE LAWRENCE Y. SHERMAN
Lieutenant-Governor of Illinois, Springfield

The common school system of this State has been elaborated, and has kept pace with the growth of Illinois. It began under very humble circumstances. It has developed until it is entirely worthy of such a State.

I presume, from the standpoint of those who are charged with legislative duties, we naturally look at the question of taxation. We are interested more in furnishing the funds to support the State school system, because we are primarily charged with the levy and collection of that tax. We are expected to furnish the means, and if the tax rate should become too high, we are expected to furnish an explanation.

The taxing question is a sensitive one among all English-speaking people. Those who are charged with the taxing powers are more susceptible to criticism and fear that criticism more upon that than upon any other question. The taxpayer is more disposed to carry his grievance to the polls or to the point of revolution among English-speaking races, and even among those of Germanic or north of Europe origin, upon this than upon any other question. We consequently, either through ignorance, or by the development and application of common law principles to our own form of government on this continent, and especially in the United States, have become sensitive on this question, along with those who helped frame the government we are enjoying today, but laid the foundation upon which these principles were subsequently developed.

So Illinois has regard to her taxable property. It begins with the local taxation in the humblest form of the school system. It begins in the district school, that is the lowest form of corporate life with the fewest powers of any taxing body in this State. Beginning here it develops until it reaches the form of municipal life. It reaches the graded school, then the normal school, then the university. Beginning with the broad base of the common school system it ends with this University, that is established by the power of the State and maintained in large part by public taxation. All that has been given by the national government, while it is sufficient to found, is insufficient to maintain. The school system of this State is administered by public agencies. There are in those agencies not only institutions but there are laws, and the laws must be administered by human beings, and we must take them as we find them. At Springfield in the levying of taxes and in the expenditure of public funds, it is entirely too much to expect that any reformation will begin after a representative of the Legislature lands in his seat, if I may be allowed to use that colloquial phrase. He is not merely a product of heredity and environment; he is more than that, as this may be applied generally to men in public affairs and responsible places. A member of the Legislature is a product of a situation that knows no heredity, knows no environment. He is certainly a mixture of the strangest elements that the sun in our solar system ever shone upon. It is non-racial; it is political, in all that politics implies among English-speaking people, from the days of the organization of the English Parliament down to the Illinois Legislature. It is political in the strict sense of the word. And among the political elements of Illinois there must always be considered the race question, especially in Chicago. There we find representatives of all the great and best races of the old world to a greater extent than in any other city on the American continent. There is scarcely a great race whose forebears reach back to the early history of the world, that has not sent liberally of its people to the

United States. They are here as an enduring element of American life. They have brought with them in many instances the best blood, and have contributed much to the modification of the institutions and customs and letters of the mother country. And while they have come, some of them, with preconceived ideas of government, they have modified them, have changed them, when change is necessary, until they have become a component part of the administration of public affairs in Illinois.

Now the state is not an abstraction, conceived by an idealist who dwells in an aircastle. The state is a collection of powers making towards definite ends. Those powers are lodged in and administered by departments, operated by human beings. The state government is not automatic either. We sometimes think it is so. The reasons are evident. Take any statute in this State as an entirety. It is a growth. It begins with humble surroundings, and sometimes ends with great power, as population increases, and the resources of the country are developed. Sometimes it ends in disaster. Always remember that ideal law on paper, applied to ideal conditions, operated by ideal men, is one thing; but legislation is not an exact science. It is not like a mechanical power, that can be gauged or measured so well that you know to the last horse-power what will be applied to the working point. Its strength and instruments are unknown. In its early stages legislation was nothing but an experiment operating upon an aggregation of chances. The State capitol at Springfield is a mausoleum of repealed statutes. Some served their purpose and served them well. Some have become demonstrated errors, some have become obsolete, and some have been rendered nugatory by judicial construction and decisions.

At one time the General Assembly of this State was the source of nearly all the governing power of Illinois. The executive was weak. The judicial bodies were dependent upon it for their tenure of office and the amount of salary. In its original form the primitive government was a government that was either legislative or something that answered to a legislature.

In every republican form of government these primitive forms have been expressed in various ways, but as the population increased, and the resources of the country grew, and those intangible things, that are greater even than can be seen, developed, as human rights began to be guarded, as institutions developed; then we began to understand that the legislature needed subdivision. That subdivision came; boundaries were struck off, so that those powers should be exercised definitely by the three great departments, the legislative, executive and the judiciary.

For many years in this State the General Assembly passed special laws. Those special laws covered almost every conceivable branch

of subjects. In those days there was not a corporation, business or eleemosynary, that was not created by a special act of the General Assembly; and from that power vested in the General Assembly came the breath of corporate life. This special legislation is no more, except in certain portions of the State. Certain business corporations have perpetual franchises and have the power to endure indefinitely. They are given the right to be a corporation in perpetuity. Others of various kinds still exist as a living witness to the charter powers granted by the special legislation from the early General Assemblies of this State. That has changed. It has been changed by the organic law of this State. That change came slowly. The debates in the Constitutional Convention show that every section which permitted of any form of special legislation met with the most strenuous opposition. It was an evil, an admitted evil, but like a great many other evils it died hard. Illinois emerged slowly from the tangled growth of special legislation, and like these repealed statutes mentioned, it slumbers forgotten. We have outlived it all.

Among those special charters granted are those giving to school districts the right to endure under that special act, as a school body vested with the sovereign powers of taxation and the expenditure of money. Out of the many hundreds of these legislative hydras that were once to be found in Illinois there remain but thirty-six, in various parts of this State. They are a part of the common school system of this State. And they are, it is proper to be mentioned and considered, here in this University as they are in the adjoining districts of the territory embraced in these special charters. The provisions in those charters are as dense and, in some instances, as contradictory as the wishes and opinions of those who wrote them, and procured them to be granted.

The State School Lands were originally more than a million acres. That grant was general in its terms. It vested the title in the State or in the institutions that represented branches of the State government. The Legislature of this State during a critical period put much of it in the hands of specially chartered districts. It authorized the land to be sold, and the money invested as a school fund.

There is now in this State seventeen million dollars remaining. Of this amount fifteen millions are found inside of Cook County. Two millions are found outside, in the other one hundred counties of Illinois.

Chicago, wherein the bulk of this fund is now found in concrete form, has kept her lands. The school authorities in the counties outside have, through enabling acts, sold theirs. Bad investments, embezzlements and kindred offenses have scattered this heritage until the existing remnants only tend to remind us of what might have been.

Money is a somewhat intangible blessing. It is hard to get, and easy to part with. It is a harder thing to keep and an easier thing to part with when it is in a school fund than in any other form. This is enough to convince any person that no investment of public money of any kind by a custodian subject to appointment can be long continued without great risk.

The school system ought to be a state system. No aboriginal or special charters ought to make their districts sustain merely tribal relations to the general school laws of Illinois. There ought to be in every state a system complete and uniform, and that uniformity cannot be while special charters remain.

No one-man power ever ought to be permitted to control or direct the expenditure of money and the tax-levying power. Such funds ought to be paid out for legitimate purposes under the provisions of a general school law of this State. Where there are diverse bodies or authorities that are given powers to inspect, examine or sustain the levy in such a way that there may be a system of check and accounting, there the one-man-power evil in the expenditure as well as the procurement of money will not exist. Every school board ought to be more than a mere tax-levying and tax-collecting agent.

I think I remember some four or five years ago, if you will permit me to become personal for a moment, when I contributed to the passage of an indefensible law at Springfield. That law was a mistake. I will not say it was a mistake so far as it related to the particular results that followed within the limits of that district, but in a vital point, the uniformity that ought to characterize every state school system to be successful, it was inexcusable. The arrangements under which that legislation was originally enacted had ceased at the last session of the Legislature. It was repealed because I believe it was regarded as an extremely vicious legislative precedent. Even legislatures are sometimes bound by precedents, not very often though; and I don't blame them. Sometimes they don't know what the precedents are, the representatives are changed by you so often.

Now let me suggest without mentioning any names here, that in this special school district evil, for I so regard it in a general way, although particular instances may procure good results, that the State Superintendent of Public Instruction, now holding office in this State had done more by instruction and advice, by kindly efforts in the promotion of legislation, to destroy the special school districts in Illinois than any other official in the history of this State. Let me say in the brief time remaining that if I were a member of Congress, and may a merciful and beneficent providence never visit upon me or any of us that affliction—but, if I were a member of Congress (I say that advisedly)—I am taking you into my confidence when I tell you I wouldn't go there if I had a chance, and I am talking in earnest

now, and not by the way of jest at all; but if I were a member of Congress and there was a new state seeking to be admitted into the Union to be framed out of territory now existing under territorial government, there would not be a solitary dollar granted by the United States government to that newly-admitted state—not a dollar in money for the purpose of creating a fund to be distributed among newly-created states for school purposes. I would keep the money to govern the islands of the sea or to govern the people at home when they need governing.

If there should be a land-grant connected with the organic act admitting territories to the Union, that land-grant coming from the Congress, ought to carry with it a fixed provision that not one acre of that land should ever be sold, or authorized to be sold by the general assembly of any State.

It ought to be inalienable. If that provision had been in the original grant as to all the school lands in Illinois, there would today have been a magnificent domain of farm land in Illinois instead of what we have. Outside of Cook County the lands have appreciated enormously in value. Sometimes there may have been periods during panics when rents were small, but they were not subject to taxation, and as property has increased in value there would today have been a fund that would support more schools, train more children, make more beautiful school houses, hang more pictures on the walls, plant more trees, and make the country school house a fit place for your boys and girls than would all the taxes levied in Illinois today for school purposes.

The state school system must be expanded with the growth of the State, and the growing need of the people. The district school is at the foundation and answered well the purposes for which it was intended. It answered the needs of pioneer boys, the early fabric of American life. Later it became necessary that the State establish and support an institution in which special fields of learning and research are open to the student. No man can live the old way. We may talk about the primitive days of our great-grandfathers. We may talk of the pioneers of Illinois and regret that we cannot now resort to their methods of life; it would be impossible. We may regret that some of their simplicity has not survived, some of their directness of purpose, their energy. We may sometimes think we have lost something in the transmission from then till now, but we must remember they lived under widely different conditions.

This State of Illinois was a prairie; the settlements were along the rivers. The flatboat owners were the common carriers to carry what little they had to ship. They lived the simple life, that is true. There is nothing to hinder anyone from living the simple life now; but don't forget that the simple life of 1905 cannot be just as simple as it was in

1805. As things are now, the capacities and the possibilities of the present life are enormously multiplied.

Human beings live just the same way as they used to; they still inhale the air, and take food and require exercise. We forget that sometimes in the cities, but the civilization of today is such as to require an expansion of the educational system of Illinois as well as of other states, and Illinois will show herself equal to that requirement.

MILITARY EXERCISES

1:15 P. M.

PROGRAM

Assembly of the University Regiment on Illinois Field.

Salute (13 guns) to Major-General John F. Weston of the United States Army.

Escort of the Color.

Review of the Regiment by Major-General Weston, representing the War Department of the United States.

Parade.

EXERCISES AT THE ARMORY

The Honorable Joseph G. Cannon, Speaker of the National House of Representatives Presiding

Music: The Military Band.

Addresses: The Military Training of the Citizen Soldier, Major-General Weston; Lieutenant-Colonel Julius R. Kline of the Illinois National Guard.

Music: The Military Band.

MILITARY TRAINING OF THE CITIZEN SOLDIER

MAJOR-GENERAL JOHN A. WESTON
Commissary-General of the United States Army

The formal installation of the President of this famous University is the occasion of this notable gathering; and a feature of the exercises is a short address which I have been invited to deliver upon the form of military training at the University. The subject is one of national concern and has always had an absorbing interest for military men.

More than forty years have elapsed since this institution of learning made the study of military science and tactics an element in its educational training of the youth of the land. It will not be forgotten that the bill creating the endowment fund for the purpose was signed by Lincoln, the adopted son of Illinois, the great and gentle soul who loved his country, who believed in her future, and blessed the patriotic

soldiery that made possible her lofty destiny. Lincoln, and those allied with him in this beneficent scheme for advancing the interest and defending the life of the Republic, builded better than they knew, and placed posterity under lasting obligation by this exhibition of wisdom and liberality. The law which gave the endowment for this purpose was passed in the summer of 1862, when "War rocked the continent;" but at the end of that fratricidal struggle the safety of the Republic was assured and brotherhood and union secured forever. These things the nation had not known since its foundation and could never perhaps realize without passing through the fiery furnace of war.

At the present time there are seventy-nine schools and colleges, representing forty-three states and territories of the Union, where military instruction is afforded the students under the direction of officers of the regular army, detailed as professors of military science and tactics. This list does not include a number of similar institutions, or the many high schools and others where some form of military training is in vogue. The subject is each year exciting more and more interest. Faculties and institutions are giving loyal support to the cause which means so much to the country, and the army officers engaged as military professors are ranked as members of the faculty and are exhibiting judgment, tact and skill, and acquitting themselves with the highest of credit. The future gives every promise of a happy continuance of this condition and an even wider sphere of usefulness to this admirable system.

The government is fostering a proper and laudable military spirit in the youth of the nation by more liberal appropriations, affording completer equipment for military study and training. The President is deeply interested in the cause and with that practical and far-seeing wisdom with which he is gifted has authorized the announcement that from six of the institutions (where officers of the army are detailed as military instructors) whose students exhibit the greatest interest, application and proficiency in military training and knowledge, an appointment as second lieutenant in the army from each one of the six institutions will be awarded to an honor graduate who has taken a military course thereat.

This policy is a wise one and as it should be in a republican form of government. Its sons and citizens are its natural defenders, their courage and lives are its strongest bulwark, as they are the safest guardians of their own rights and liberties. In the event of a war on a great scale, among the most vital needs of the hour would be trained officers. To supply these, the country in such a time would have to draw upon the enlisted strength of the army, upon the National Guard, and could perhaps in a limited degree call upon the veterans of the Civil and Spanish Wars. But all of these sources would be inadequate

to meet the demand. How necessary it is, then, that this younger race, who would have to make the fight and who have the destiny of their country in their keeping, should be educated in military science, taught a love for the country and the flag, and fitted for the sacred duty of a soldier as well as a citizen. They would be a nucleus upon which to form our armies, a body of trained and intelligent patriots ready at a moment's notice to answer the call of their country.

Until two years ago the militia law was lacking in comprehensiveness as a scheme to insure the efficiency of the militia of the country, and Congress, recognizing the essentials which it lacked, endeavored to remedy the deficiency by the passage of the act of January 31, 1903, which revoked and remodeled the old militia law and system. This act is likely to be still further modified and extended so as to meet every requirement of national defense and place the militia system on an entirely satisfactory foundation. Congress in a generous spirit, having increased and broadened the scope of the law, has also made more liberal appropriations. In a few years it has increased the annual appropriation for the militia from four hundred thousand dollars to a million dollars. This goes a long way towards affording adequate equipment and facilities, as well as means for encampments and maneuvers on a large and instructive scale.

The officers of the National Guard can under conditions prescribed by the present militia law become students in the service schools of the army, and thus receive instruction and derive the benefits that come from such an admirable system of training. Under the same law there is a provision for an eligible list by which trained and competent officers are to hold commissions in the volunteer force and to be ready to answer future calls and emergencies in times of war.

I am glad and deem it gracious and fitting that a soldier should be invited and given an opportunity to interpret to those who come from the walks of civil life something of the soldier's feelings and aspirations, both of which are often misunderstood and at times deliberately misjudged. Criticisms that are now and then levelled at the army are unjust and unworthy of those who in thoughtless mood give expression to them.

Soldiers are loyal citizens in heart and purpose, if they are denied the ballot. Shut out from the ambitions and rewards of civic life, they are none the less devoted and consecrated to their country's welfare, and love with passionate devotion the flag they follow and see almost hourly in their lives. It is to them the symbol of power and protection, the inspiration and hope of patriotic devotion. Our soldiers, like these young men here, come from the body of the people, are matured in honest homes, many are graduated from the colleges and schools of the land, and come to seek honorable careers in the military service of their country. They are loyal, respect the law of

the land, and obey the orders of their superiors; and as a beautiful illustration of this spirit I have only to cite the way in which hundreds of thousands of men who have served in the armies of the Civil war on both sides returned to the vocations they had been pursuing before they enlisted. There was no attempt on the part of the victors to upset the form of government, there was none on the part of the defeated except to honestly abide by the terms of peace.

There is perhaps no public question on which the two political parties of this country are more closely united than on that of the standing army. Neither of them wants a very large one. That is perhaps as it should be, and we will proceed on those lines, *viz*: by educating our youth and by organizing our state troops. In all the wars we have had, perhaps in all that we will have if of any magnitude, it will have to be done largely by our volunteers.

The conditions and requirements of national defense have been admirably stated by Colonel Britton of the National Guard of New York, who said:

"As a general principle, the greatest economy of man, resources, and time in the conduct of war lies in the ability of a country to put into the field, with the least delay, the largest forces that may be necessary, properly organized, trained and equipped; otherwise, however great her natural resources, experience has shown that final triumph has been dearly bought at an extravagant price in blood and treasure."

If there is one lesson which history teaches it is that what is worth having and worth holding in nations or individuals must be defended. The benefits arising from early training cannot be over-estimated. It stamps lessons that last for life. Whatever impresses and appeals to loyalty, patriotism and constancy is not lost. Military education insures the habits of neatness, order, subordination. It fosters self-reliance and initiative—the finest qualities of the soldier; and for these the American stands pre-eminent.

A citizen soldiery should be of the highest type in a republic whose people establish by their will and suffrage the form of government under which they live and who maintain it by their courage and virtue. Trained in the paths of peace, with intellectual development and lofty ideals, such a body can never betray their country or become pliant tools in the hands of selfish and designing leaders. Their vision is too clear, their will too strong, their training too complete. Not until patriotism declines and political life becomes corrupt will they connive at the overthrow of a government founded in their will and wisdom and under which they can from the humblest station rise to the highest office and distinction.

These young men are soon to fill the ranks of civil life and pursue the various callings they severally choose. They are the coming

citizens, rulers and defenders of their native and adopted land, and the military knowledge and training received here will help in any field of endeavor. And when the crucial hour of the Republic comes as it is sure to do—for universal peace is an idle dream, as Von Moltke declared—and the fight for existence begins either with foes from within or foes from without, those who have gone out from institutions like this one will bring elements of strength into the struggle that make for peace and honor, and may prove their country's salvation. They will not fail with their keen intelligence and patriotism to appreciate the benefits of a free and enlightened government, and feeling their responsibility and knowing the blessings at stake, will defend the Republic with every energy and resource at their command.

After the battle these patriot sons, trained in a school which subordinates the military to the civil power—which is in accord with the genius of our institutions and the constitution of the land—will melt away into the body of the people, resume their wonted vocations, and earnestly strive to solve the problems of life as their fathers did before them.

If I should admonish these coming citizens and defenders of the land, it would be to say to them, "Know thyself—all wisdom centers there—love your country, study and have faith in its institutions, regard it as a privilege to fight for, aye an honor to die for it."

ADDRESS

LIEUTENANT-COLONEL JULIUS R. KLINE
Of the Illinois National Guard

I feel honored that I have been selected to address you upon an occasion of this kind, honored indeed that you have called upon me to represent the military organization of this State, and more than honored that it is my privilege to bring you a message on behalf of the descendants of the men who followed Lincoln, Grant and Logan, and who today are ready to do and dare in defense of our American institutions, our flag and our country.

Ever since the time that men, roving alone over the world and longing for the companionship of creatures of their kind, gathered together and formed the tribe, the village, the city, the state and finally the nation, there has been a duty incumbent upon each and every member of those organizations to protect that combination and the laws which govern the same to the extent of his ability, whether it required the exercise and ingenuity of the human brain or whether it required physical force and implements of destruction; and that duty to protect the community was mandatory upon the citizen. Men of the higher grade of intellectuality and the product of the higher

civilization, decry the wanton killing, maiming and wounding of their fellowman, and today there is no man who more ardently desires peace than he who has taken part in war. Those men who have seen the long line of brown, backed by the line of blue, who have heard the bugle sound the advance, who have made the charge and heard the singing of the shot and shell and the clashing of steel, and who have seen strong men in the prime of life and vigor fall helpless and stricken, who have passed through the hospitals and heard the moans and cries of the sick and wounded,—those men today are the first to echo the words of General Sherman, "War is hell, and for God's sake give us peace!" But so long as there are nations composed of men who are actuated by sordid motives, the desire of aggrandizement and demand for territorial expansion, and who are ready to back up those selfish and sordid motives by men armed with steel for the slaying of their kind, just so long will there be a necessity for the military within the United States; but to the eternal credit of the people of this land of freedom, our contentions are not and never shall be based upon a sordid desire for more territory or greater power, and such armed force shall only be maintained in the protection of our homes, our institutions and our country. So often as the necessity for war arises, brought about by the action of other nations, shall this nation realize that it is no greater than its natural resources, it is no more powerful than its army and navy.

Under such conditions, it becomes the duty of every state to inculcate into the minds of its citizens the patriotic motive,—the motive that will actuate them to prepare and become available for the hour of the state's or the country's need. The youth of today is the citizen of tomorrow, and to the citizen, earnest, unselfish and patriotic, the state and the country must ever look for its protection and its higher welfare.

A valuable adjunct to the National Guard and the army of the United States, stand the military schools of this country. By their perfect system of training in the hands of experienced men, they place in the body of the country young men experienced in the art of warfare and in the handling of the weapon, men who, by reason of that experience and training, are able to train other men and make them a perfect and available fighting force. The National Guard also serves a higher purpose than the mere training of men to warfare. The National Guard does not pander to the pride of men. It is something more than a body which allows the citizen to adorn himself in all the panoply of war and gratify his vanity by the glare and glitter of brass; it teaches those men who enter its ranks one of the greatest cardinal principles of life, discipline, the finest attribute of the perfect soldier. While God in his infinite mercy has armed us with all the attributes of perfect manhood, has given us eyes to see the hills and plains and

flowers, mute messengers from heaven to beautify the earth and delight man's sense, ears to hear the soft sighing of the wind, the language of the wave and the revealed word of God to man, conveying His glorious message of salvation to the soul, brains and intellect to comprehend the beautiful in life and nature; the "still small voice" to enable us to distinguish right from wrong; he has also implanted within our breasts hope, the well-spring and foundation of honest ambition, the actuating force of honest endeavor, hope, which urges us on to do and to dare, hope which brings us closer to wiser and nobler things.

But with all these inherent forces for good, men are controlled by a power more potent and with more control over the individual than any outside person or condition. It is your own inclination, it is yourself, and mightier than kings and more powerful than conquering heroes is the man who can control his own inclinations when for evil, and the overcoming of those inclinations brings him closer to the God who made him and makes him a better man and a better citizen. The National Guard, by its lessons in discipline, brings men nearer to control of themselves than any lesson that can be taught them in the schools or everyday life. It teaches them the responsibility of true citizenship, it says to them, "We protect the life of the citizen and the morals of the home that they may not be desecrated or infringed upon." It means the protection, in short, of the entire people of the community which they may be serving.

Even as the sun, bring orb of day, sets in the west, and the moon, queen of the night, rises in all its glory over the hills and plains of this great sovereign State, from the beautiful lakes in the north to the mighty river of the south, to the mighty river of the west, and over the fertile field of the east, four million people sleep more securely in the knowledge that they are guarded by night as well as by day by eight thousand men, sworn to fealty, sworn to loyalty, sworn to protect them, whose motives are for God, for their country and for American institutions; and should the time ever come when men, actuated by selfish principles or by lack of self-control, shall dare to raise the hand of war against the cherished institutions of this State or of the United States, these men will find that back of the cities stand the states and back of the states stand those men who are ready to do and to dare, who are ready to sacrifice home and family, yea, even life itself, in defense of their country and its laws; and as they march to victory or perchance to death, under that beloved emblem of our nation, which proclaims liberty and equality to all mankind, in their hearts they repeat the words of that grand, sweet song,

"My country, 'tis of thee,
Sweet land of liberty,
Of thee I sing."

THE STUDENTS' PLAY
PROGRAM

AT THE PLAIE-HOUSE IN CHAMPAIGN

Tuesday Evening the seventeenth of October 1905

*A Right Wonderfull Comedie
cald*

THE HONORABLE HISTORIE OF

FRIER BACON AND FRIER BUNGAY

As it was plaid by her Maiesties servants

In London towne 1589

Made by *Robert Greene* Maister of Arts

Acted for the first time in this countrie, by the present companie
of students, in this Plaie-house, the
eighth of Maie 1905

Heere follow the names of all the plaiers:

Edward, Prince of Wales, sonne to King Henry	.. William T. Gordley
Raphe Simnell, the Kings Foole	..... R. C. Matthews
Ned Lacie, Earle of Lincoln	..... Herman G. James
John Warren, Earle of Sussex	..... Louis W. Mack
Will Ermsbie, a Gentleman	..... Harry P. Reeves
Frier Bacon	..... Allan J. Carter
Miles, Frier Bacons Poore Scholer	..... Earl Q. Snyder
Burden, Doctor of Oxford and Maister of Brazennose	
	..... Alexander H. Gunn
Clement, Doctor of Oxford	..... Roswell T. Pettit
The Hostess at Henly, Mistress of the Bell	..... Tirzah Bradley
A Devill	..... John S. Kendall
Thomas, a Farmers sonne	..... David S. Meadows
Jone, a Farmers Daughter	..... Edith Spray
Margret, the Keepers Daughter of Fresingfield Lois Clendenin
Ladyes of the Court	<div style="display: flex; align-items: center; justify-content: space-between;"> <div style="flex: 1; margin-right: 10px;"></div> <div style="border-left: 1px solid black; padding-left: 5px; margin-right: 10px;"></div> <div style="flex: 1;"></div> </div>
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Hercules.....	Lawrence T. Allen
Lambert, a Countrie Gentleman.....	J. L. Bannon
The Keeper of Fresingfield.....	George H. Anderson
Serlsbie, a Countrie Gentleman.....	Homer W. Harper
A Post-boy.....	Roswell T. Pettit
Young Lambert.....	Alexander H. Gunn
Young Serlsbie.....	Howard G. Brownson

A Table of the Severall Scenes in the Comedie

Act I	—Scene 1—The countrie side in Fremingham.
	Scene 2—Bacons study at Brazenose Colledge in Oxford.
	Scene 3—Neere Harlston Faire.
Act II	—Scene 1—The Court at Hampton House.
	Scene 2—Oxford.
	Scene 3—Bacons Study.
	(The front of the stage shewes what is seene in the prospective glasse.)
Act III	—Scene 1—The Regent House at Oxford.
	Scene 2—The contrie side at Fresingfield.
	Scene 3—Bacons Study.
Act IV	—Scene 1—Bacons Study.
	Scene 2—The Court.
	Scene 3—Bacons Study.
	(Heere likewise the front of the stage represents what is seene in the prospective glasse.)
Act V	—Scene 1—Neere the Keepers Lodge.
	Scene 2—An open place.
	Scene 3—The Court.

The Patronesses of this Plaie are

Mistresse Edmund Janes James
Mistresse David Kinley
Mistresse Daniel Kilham Dodge
Mistresse Thomas Arkle Clark
Mistresse Edward Fulton
Mistresse Edward Chauncey Baldwin
Mistresse John Quincy Adams

The Direction of the plaiers has beene the care of

Maister Thacher Howland Guild

The care of moneys and suchlike businesse dutees has been
the paines of

Maister Frank William Scott

The sundrie thinges about the stage have beene
paid attention to by

Maister Lester E. Rein and Maister John Stehmen

The Maister of Fence is

Maister Everett B. Murray

WEDNESDAY, OCTOBER 18, 9:00 A.M.
FORMAL RECEPTION OF DELEGATES
AT THE ARMORY
PROGRAM

Judge Oliver A. Harker, Dean of the College of Law, Presiding

Address of Welcome: Judge Oliver A. Harker.

Roll Call of Foreign Universities: Responses by Representatives bringing Congratulatory Addresses.

Roll Call of American Universities: Responses by Representatives bringing Congratulatory Addresses.

Roll Call of Learned Societies and Other Bodies: Responses by Representatives bringing Congratulatory Addresses.

Brief Addresses:—

Foreign Universities: Henry T. Bovey, LL.D., M. Inst. C. E., F.R.S., Dean of the Faculty of Applied Science, McGill University, Montreal.

The State Universities: James Burrill Angell, LL.D., President of the University of Michigan.

The Universities of the East: Ira Remsen, M.D., Ph.D., LL.D., President of Johns Hopkins University.

The Universities of the West: Frank Strong, Ph.D., Chancellor of the University of Kansas.

The Universities of the South: Edwin Boone Craighead, LL.D., President of Tulane University.

The Universities and Technical Schools of the State: Harry Pratt Judson, LL.D., Dean, University of Chicago.

The Colleges of the State: Charles Henry Rammelkamp, Ph.D., President of Illinois College.

The Normal Schools of the State: John Williston Cook, LL.D., President of the Northern Illinois State Normal School.

The High Schools of the State: James E. Armstrong, A.M., Principal of the Englewood High School.

The Elementary Schools of the State: Honorable Alfred Bayliss, B.A., State Superintendent of Public Instruction.

LIST OF DELEGATES
UNIVERSITIES AND COLLEGES

University of Oxford: Professor Edward B. Titchener, A. M., Ph.D.
 University of Cambridge: Dean H. T. Bovey, LL.D., M. Inst. C. E.,
 F.R.S.
 Queen's College, Oxford: Professor G. W. Greenwood, A.M.
 Gonville and Caius College, Cambridge: Professor F. F. Westbrook,
 A.M., M.D., C.M.
 Trinity Hall, Cambridge: Lathum Gallup Reed, B.A., LL.B.
 University of Glasgow: Mr. William Robert Lang.
 Queen's College, Cambridge: Dean H. T. Bovey, LL.D., M. Inst.
 C. E., F.R.S.
 Brasenose College, Oxford: Professor B. Titchener, A.M., Ph.D.
 Royal College of Physicians of Edinburg: Dr. James Crawfurd Dun-
 lop, F.R.C.P.E.; Professor John Clarence Webster, F.R.C.P.E.
 McGill College and University: Dean H. T. Bovey, LL.D., M. Inst.
 C. E., F.R.S.
 University of Toronto: George H. Locke, Ph.D.
 St. David's College: Right Reverend D. Williams.
 Polytechnische Lehranstalt, Copenhagen: Mr. L. Storm.
 Technische Hochschule, Hannover: Mr. C. L. Stroebel.
 Queen's University, Kingston, Ontario: Professor William T. Mc-
 Clement, M. A.
 Trinity College, Toronto: Right Reverend C. T. Anderson, D.C.L.
 Victoria University of Manchester, England: Professor Ernest
 Ritson Dewsnap, M.A., F.R.G.S., F.S.S.
 University of Madras, India: S. Satthianathan, M.A., LL.D.
 College of Engineering, Madras, India: S. Satthianathan, M.A., LL.D.
 Royal Real Instituto tecnico superiore, Milan, Italy: Phillip Porchio.
 Keble College, Oxford University: Reverend John Charles Roper,
 D.D.
 American School of Classical Studies, Athens: Professor Paul Shorey,
 Ph.D.
 University of Leeds, England: Mr. Percy Nicholls, B.Sc.
 Reid Christian College, Lucknow, India: Reverend J. N. West, M.A.
 Harvard University: Professor Abbott Lawrence Lowell, B.A., LL.B.
 Yale University: Professor R. H. Chittenden, Ph.D.
 University of Pennsylvania: Professor Simon N. Patten, A.M., Ph.D.
 Princeton University: Ernest C. Richardson, A.M., Ph.D.
 Washington and Lee University: President George H. Denny, A.M.,
 Ph.D., LL.D.
 Columbia University: Professor James McKeen Cattell, A.M., Ph.D.
 Brown University: Mr. Donald L. Morrill, A.B.
 Rutgers College: Professor Graham Taylor, D.D.

Dartmouth College: Professor Harlow S. Person, Ph.D.; Mr. Henry H. Hilton, A.B.

Georgetown University: Mr. Patrick H. O'Donnell, A.B., LL.B.

Dickinson College: President George Edward Reed, S.T.D., LL.D.

Western University of Pennsylvania: Chancellor S. B. McCormick, A.M., D.D., LL.D.

University of Tennessee: President Brown Ayers, Ph.D.

University of Vermont: President Matthew H. Buckingham, D.D., LL.D.

University of Georgia: Chancellor Walter B. Hill, A.M., LL.D.; President H. C. White, Ph.D., of the College of Agriculture and Mechanical Arts.

Washington and Jefferson College: President James D. Moffat, D.D., LL.D.

United States Military Academy, West Point: Mr. Charles L. Hammond.

Vincennes University: President Horace Ellis, Ph.D.

Andover Theological Seminary: Reverend Pearse Pinch.

Hamilton College: Myron H. Beach, LL.D.

Allegheny College: President Henry William Crawford, A.M., D.D.

Indiana University: President William L. Bryan, A.M., Ph.D.

George Washington University: President Charles Willis Needham, LL.D.

Central University: President Frederick William Hinitt, Ph.D., D.D.

Miami University: President Guy Potter Benton, A.M., D.D.

Kenyon College: President William Foster Peirce, A.M., L.H.D.

Western Reserve University: Professor Charles Harris, Ph.D.

Shurtleff College: President J. D. S. Riggs, A.M., Ph.D., LL.D.

McKendree College: President McKendree Hypes Chamberlin, A.M., LL.D.

Illinois College: President C. H. Rammelkamp, A.M., Ph.D.

St. Louis University: Eugene C. Slevin, A.M.

McCormick Theological Seminary: President James Gore King McClure, D.D.; Professor Andrew C. Zenos, A.M., D.D.

Dension University: Dean Francis W. Shepardson, Ph.D.; Principal J. Stanley Brown, A.M.

New York University: Professor Frederick W. Carpenter, Ph.D.

Wabash College: President William P. Kane, D.D.

Oberlin College: President Henry Churchill King, B.D., A.M., D.D.

Haverford College: Professor Arthur M. Charles.

Hartford Theological Seminary: Reverend William A. Bartlett, D.D.; Professor Austin Bradley Bassett.

Union Theological Seminary: Professor William Adams Brown, Ph.D., D.D.

Mt. Holyoke College: Mrs. Zella Allen Dixon.

Rush Medical College: Professor A. C. Cotton, A. M., M. D.
Knox College: President Thomas McClelland, B.D., A.M., D.D.
University of Michigan: President James B. Angell, LL.D.
University of Missouri: Acting President J. C. Jones, Ph.D.; Professor G. E. Ladd, A.M., Ph.D.; Doctor A. L. McRae, S. D.
University of Notre Dame: Reverend J. W. Cavanaugh, C.S.C.
Albion College: President Samuel Dickie, M.S., LL.D.
Iowa Wesleyan University: President John W. Hancher, A. M., S.T.D.
Ohio Wesleyan University: President Herbert Welch, D.D.; Dean W. F. Whitlock, D.D., LL.D.
Earlham College: President Robert Lincoln Kelly, Ph.D.; Professor Arthur M. Charles; Mr. Morris E. Cox.
Illinois Woman's Collegé: President Joseph R. Harker, Ph.D.; Mr. A. K. Hollowell.
Beloit College: President Edward Dwight Eaton, D.D., LL.D.; Professor Robert C. Chapin, B.D.
Otterbein University: President Lewis Bookwalter, A.M., D.D.
Lawrence University: President Samuel Plantz, S.T.B., Ph.D., D.D.
University of Wisconsin: President Charles R. VanHise, M.S., Ph.D.; Professor William A. Scott, Ph.D.; Dean E. E. Turneaure, C.E.
Iowa College: Dean John Hanson Thomas Main, Ph.D.; Professor Bruce Fink.
College of the City of New York: President John Hustan Finley, Ph.D., LL.D.
Rockford College: President Julia Henrietta Gulliver.
University of Rochester: Professor C. C. Pickett, A.M., LL.B.
Hiram College: President C. C. Rowlinson, A.B., S.T.B.
Illinois Wesleyan University: President Frank G. Barnes, A.B., D.D.; Professor Robert Orlando Graham, M.A., Ph.D.; Judge Owen Thornton Reeves, LL.D.
Austin College: President Delmar R. Bebont.
Lasell Seminary: Miss Nora J. Burroughs.
Christian Brothers' College: Professor Ralston T. Wilbur, M.E.; Reverend Brother Bernadine Robinson, A.M.
Ripon College: President R. C. Hughes, A. M., D.D.
Lombard University: President Lewis Beals Fisher, D.D.
Westminster College: President David R. Kerr, D.D., Ph.D.
Hedding College: President Harry B. Gough, A.B.
University of Mississippi: President Robert B. Fulton, A. M., LL.D.
Northwestern University: Acting President Thomas Franklin Holgate, A.M., Ph.D.; Professor Henry Crew, Ph.D.; Professor James Alton James, Ph.D.; Professor Charles Louis Mix, A.M., M.D.
Western College for Women: President Lilian W. Johnson, Ph.D.; Dean Mary A. Sawyer.

Butler College: Professor Thomas Carr Howe.
Eureka College: President Robert Enoch Hieronymus, A.M.
Hillsdale College: President Joseph William Mauck, A.M., LL.D.
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Western Theological Seminary (Alleghany): Reverend Thomas D. Logan.
Monmouth College: President Thomas Hanna McMichael, A.M., B.D., D.D.
Cornell College: President Fletcher King, D.D., LL.D.
Illinois State Normal School: President David Felmley, A.B.
Michigan Agricultural College: President Jonathan Le Moyne Snyder, Ph.D.
Upper Iowa University: President William A. Shanklin, D.D.
Baker University: President Lemuel Herbert Murlin, D.D., S.T.D.
St. Lawrence University: President Almon Gunnison, D.D., LL.D.
Chicago Theological Seminary: President Joseph Henry George, A.M., Ph.D.; Professor Graham Taylor, D.D.
Lucy Cobb Institute: Principal M. A. Lipscomb.
Pennsylvania State College: President George W. Atherton, LL.D.
Washington University: Professor Calvin M. Woodward, A.B., Ph.D.
Olivet College: President Ellsworth G. Lancaster, Ph.D.
Adrian College: Professor H. L. Freeman.
Lenox College: President F. W. Grossman, D.D.
Blackburn College: President Thomas W. Lingle, M. A.
Augustana College and Theological Seminary: President Gustav Andreen, D.D., Ph.D.; Professor Carl Esbjörn; Vice-President Conrad E. Lindberg, D.D.
Louisiana State University: President Thomas D. Boyd, A.M., LL.D.
St. Francis Solanus College: Vice-President P. F. Hansser.
Wheaton College: President Charles A. Blanchard, D.D.
Northwestern College: President H. J. Kiekhofer, A.M., Ph.D.
Grand Prairie Seminary and Commercial College: S. D. Benthuyzen.
Washburn College: President Norman Plass, A.M., B.D.
Westfield College: President W. R. Shuey.
Lincoln College: President J. H. McMurray, A.M.; Professor Herbert Earle Buchanan, A.M.
Vassar College: Mrs. Edward Fulton, A.B.
Pritchett College: President U. S. Hall, A.B.; Dr. C. C. Hemanway.
Lincoln Institute: President B. F. Allen.
New Hampshire College of Agriculture and Mechanical Arts: President William David Gibbs, M.S.
University of Kansas: Chancellor Frank Strong, A.M., Ph.D.
Carleton College: President William Henry Sallmon, A.M., D.D.; William M. Payne, Ph.D.; Mr. E. A. Fath.
Fisk University: President James Griswold Merrill, D.D.

Kentucky Wesleyan University: President John Langdon Weber, D.D., Litt.D.

Garrett Biblical Institute: Professor Charles Macaulay Stuart, M.A., B.D., D.D.

University of Maine: President George E. Fellows, Ph.D., LL.D., L.H.D.

University of Minnesota: Professor John J. Flather, M.M.E.

West Virginia University: President Daniel B. Purinton, Ph.D., LL.D.

Cornell University: Professor Edward B. Titchener, A.M., Ph.D.; Professor Waterman Thomas Hewitt, Ph.D.

St. Viateur's College: Reverend M. J. Marsile, C.S.V.; Reverend E. L. Rivard, C.S.V., D.D., Ph.D.

University of the South: Vice-Chancellor Benjamin E. Wiggins, A.M.

Ewing College: President Julius A. Leavitt, D.D.; Reverend George C. Moor, A. M., Ph.D., D.D.

Iowa State College of Agriculture and Mechanic Arts: President Albert Boynton Storms, A.M., D.D.

St. Mary's School: President Charles Wesley Leffingwell, D.D.

Swarthmore College: President Joseph Swaim, A.M., LL.D.

University of Nebraska: Chancellor E. Benjamin Andrews, D.D., LL.D.

Ohio State University: President William Oxley Thompson, A.M., LL.D.; Dean Edward Orton, Jr., M.E.

Leland University: President R. W. Perkins, A.M.; Mr. James S. Dickerson.

University of Cincinnati: President Charles William Dabney, Ph.D., LL.D.; Reverend Henry Melville Curtis, D.D.; Professor Louis Trenchard More, Ph.D.

Stevens Institute of Technology: Professor Morgan Brooks, M.E.

Buchtel College: President A. B. Church, D.D.

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Lake Forest College: President Richard Davenport Harlan, D.D., LL.D.; Professor Lewis Stuart, A.M., Ph.D.

Shorter College: President T. J. Simmons, A.M.

University of Colorado: President James H. Baker, LL.D.

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Paul Quinn College: Reverend F. J. Peterson.

Yankton College: President Henry K. Warren, D.D.

University of South Dakota: President Garrett Droppers, A.B.

Tarkio College: President J. A. Thompson, D.D.

University of North Dakota: President Webster Merrifield, A.M.

Western Theological Seminary (Chicago): Reverend N. B. Atcheson.

American International College: President Samuel H. Lee, M.A.

Pratt Institute: President Charles M. Pratt, A.B.; Miss Myrn Brockett, B. L.

Midland College: President F. M. Troxell, A.M., D.D.

South Dakota Agricultural College: President James Chalmers, D.D., LL.D.

New Mexico School of Mines: President Charles Rollin Keyes, A.M., Ph.D.; Professor Robert N. Noble.

Catholic University of America: Professor Daniel W. Shea, A.M., Ph.D.

Throop Polytechnic Institute: Norman Bridge, M.D.

University of Chicago: Dean Harry Pratt Judson, A. M., LL.D.; Professor Thomas Chrowder Chamberlin, Ph.D., LL.D.; Professor Paul Shorey, Ph.D.; Professor Shailer Mathews, D.D.; Mr. Wallace Heckman.

University of Oklahoma: President David R. Boyd, A.M., Ph.D.

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Graceland College: Vice-President Rolland M. Stewart, B.A.

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Carnegie Technical Schools: Director Arthur A. Hammerschlag.

Forest Park University: President Anna Sneeds Cairn, A.M.

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Major-General John F. Weston, U. S. A.

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Adjutant General, State of Illinois, Brigadier-General Thomas W. Scott.

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American Academy of Medicine: W. S. Hall, M.D.; Charles McIntire, M.D.

American Society of Civil Engineers: Octave Chanute, C.E.; Robert Moore.

American Institute of Architects: William B. Mundie; William W. Clay.

Chicago Academy of Sciences: Professor Thomas Chrowder Chamberlin, A.M., Ph.D., LL.D.

American Philological Association: Professor Edward Capps, Ph.D.

American Institute of Mining Engineers: H. L. Hollis; Edward C. Potter.

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American Water Works Association: Professor Daniel W. Mead; John W. Alvord, C.E.

Illinois Society of Engineers and Surveyors: Dabney H. Maury; John W. Alvord, C.E.; Daniel W. Mead; Edward Ernest Russell Trautman.

American Folklore Society: Arthur Llewellyn Eno, A.M.

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Society for the Promotion of Engineering Education: Professor Calvin Milton Woodward, A.B., Ph.D.

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American Society for Testing Materials: Professor William Kendrick Hatt.

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Agricultural Experiment Station, Madison, Wis.: Dean William A. Henry.

Kentucky Agricultural Experiment Station: Director M. A. Scovell.

Oklahoma Agricultural Experiment Station: L. A. Moorhouse.

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Illinois Live Stock Breeders' Association: Joseph R. Fulkerson, J. H. Kincaid, A. P. Grout.

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CLUBS

Chicago Athletic Association: Lawrence Heyworth, Fred Gardner, Frank W. Teeple, Frank W. Wentworth, Rex E. Beach, Wm. J. Hynes, Ralph C. Otis, Fred L. Watson, Charles M. Faye, Wm. H. Lake, Everett C. Brown, P. M. Hanney, Evan E. Evans, Wm. A. Cameron, Chas. S. Dennis, H. H. Loddell, A. D. Bevan, M.D., Wm. C. Thorne.

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CONGRATULATORY ADDRESSES

Written communications were presented from the following institutions:

Oxford University, Cambridge University, Gonville and Cains College (Cambridge), Trinity College (Cambridge), University of Glasgow, Brasenose College (Oxford), University of Marburg, University of Toronto, University of London, Queen's University (Ontario),

Trinity College (Toronto), Newnham Hall (Cambridge), Emperor Nicholas II Institute of Technology (Tornsk, Siberia), Technische Hochschule (Hanover), Magyar-O'var Academy of Agriculture (Hungary), Bowdoin College, St. Louis University, University of Missouri, Michigan State Agricultural College, Forest Park University. The representatives of the other institutions responded orally as their names were called.

ADDRESS OF WELCOME

JUDGE OLIVER A. HARKER
Dean of the College of Law

To be called upon to preside at this meeting of delegates of the leading universities of the civilized world is a high honor. Appreciating it as it comes to me unexpectedly at this hour, I cannot refrain from expressing the deepest regret that the distinguished educator and amiable gentleman selected for the presiding officer upon this occasion is by reason of his ill-health unable to be with us. During an unbroken record of thirty-seven years of service in this institution of learning this is the first public occasion on which Dr. Burrill, because of ill-health, has been unable to be present and perform his full share of duty.

In welcoming the delegates, who have honored us by accepting the invitation to attend and assist in these installation ceremonies, we can point to no splendid antiquities, no long history, as compared with the leading universities of England and Germany and other civilized nations of Continental Europe and the historic institutions of the East. In comparison with them the University of Illinois is a mere infant. But as to material equipment, student attendance, teaching force, when you come to compare it with those universities, it shows all the strength, vigor and size of full manhood. A study of the statistics of the thirty leading universities and institutions of learning in the United States for the last ten years shows that the University of Illinois in point of increase in attendance has outstripped all of them. This institution, while something like forty years old, was founded not under the present name, and up to twenty years ago not one-half of the people of this commonwealth had ever heard of it. The half who had heard of it supposed it was an industrial school, where incorrigible boys were sent for reformation, and where they might learn some kind of an honest vocation. I remember something like eighteen years ago, when as a member of the Board of Trustees, and a member of the committee having in charge the procuring of an appropriation for this building, I with others went to the Legislature and asked for the modest sum of twenty-five thousand dollars. Although the State was at that time in most excellent financial condition,

although this senatorial district was represented by one of the most popular men in the State of Illinois—Senator Mathews—all that we were able to procure from the Legislature was the meagre sum of ten thousand dollars. What was needed then was the hypnotic influence of President Draper over the Senate and House of Representatives of Illinois. In due time it came, and for the last six or eight years appropriations of one and two hundred thousand dollars have been procured with less effort than was required in procuring the appropriation of ten thousand dollars for this building.

Referring again to the student attendance for the last ten years of this institution, the period intervening from the fall of 1894 to the fall of 1904, there was an increase of from 607 to 3,391. At the beginning of that time the University of Illinois ranked with the other great universities, twenty-third; at the end of that decade fifth. The per cent. of increase in the leading universities has been as follows: Harvard, twenty-eight; Yale, thirty-two; Michigan, thirty-two; Minnesota, sixty-two; Wisconsin, one hundred and two; Columbia, one hundred and eight; the University of Illinois, four hundred and sixty-one. Such an institution, Delegates of Universities, through its Trustees, its President, its Faculty and its Alumni, welcomes you.

RESPONSE FOR FOREIGN UNIVERSITIES

HENRY T. BOVEY, LL.D., M. INST. C. E., F.R.S.

Dean of the Faculty of Applied Science, McGill University, Montreal

It is now some months since I received from the University of Cambridge a request that I should act as her representative at this pleasant and important function. The duties involved seemed to consist mainly in having the privilege of carrying to your President an address already prepared for me, and couched in the noble tongue which, ensconced in its university strongholds, has so long withstood the shocks of time. I was enticed into consent by the lightness of the duties and the interest of the occasion, to say nothing of the pressure of a feeling which I might call "noblesse oblige," a feeling which I hope will always make it difficult for any graduate to refuse the request of his Alma Mater. Time, however, brought changes, if not revenges, and just before leaving it was found that discussions involving important educational issues would unfortunately prevent our Principal, Dr. Peterson, from being present today. In this way it came about that I was asked to take a double responsibility, and to bring greetings from McGill University. McGill has not been considerate enough to write an address for me, so I must present her message as best I may. I must hope that it will be no less warm than that of Cambridge, though less sonorous, clothed as it must be in a language which we

expect—with the help of the great American nation—to find as worthy to meet the needs of the modern as Latin was to meet those of the ancient world. Not only shall we find it fit for commerce and the telegraph, to which its use was somewhat summarily limited the other day by a wellknown Frenchman, but fit also for the tongue of the masters of thought. Of course its triumphs must always depend on the nicety of the adjustment with that particular kind of tongue, or to misuse the words of a north western report on corn lands, "the yield of corn which may be expected from these lands will depend on many things and first on the presence of the cultivator, a personage often conspicuously absent.

In a tongue of the Old World, then, and in a tongue of the New, I bring congratulations to you and to your President, the two tongues being in many ways very fitting types of the two institutions which I represent. In England one day I listened to a child when he was taken to see many hoary buildings covered with ivy and lichen, and was amused to notice how soon he reflected the prevailing spirit of those around him and always asked, "How old is it?" On this side there are not wanting signs that we shall come to this—only recently I read of a dance managed according to a tradition of three centuries. But on the whole I think our child phonograph, had he been watched on this continent, would have been heard saying, "How big is it?" Well, Cambridge is decidedly old, going right back to mediæval times, where its beginnings are a little obscured by the fogs of dawn, but it would be a great mistake to suppose that age implies an inability to see anything but its past. Cambridge certainly lives in the past, pretty much, in the matter of endowment, for we do not find the state giving her two million dollars after the enlightened example of Illinois. In fact it seems to have been supposed that she had found the elixir of life and that she required nothing more in the way of financial support. In spite of this, which we cannot but consider a distinct disadvantage, Cambridge lives in the present in a very real sense, carries on the search for new truths and, at the same time, seems to be still capable of continuing her older work, that of discovering men—men who have written masterpieces of literature, who have revolutionized science and art and who, as statesmen, have changed the destinies of nations.

McGill, on the other hand, has no claims to antiquity. We celebrated our seventy-fifth birthday only two years ago, but if we have lived only through one lifetime of the world, it is emphatically a lifetime which has been "crowded with culture"—culture of everything from fields to the minds of men.

A French writer, however, has said that we are the true ancients, and so we are, if long experience gives proof of antiquity. For are we not heirs of all the ages? Which should perhaps give us a hint that

educational structures should not be revolutions starting from demolition, but would do better to be evolutions, building upon and embodying the work of the past.

When I reached Champaign I found that I was requested to make a further addition to my duties and to reply for foreign universities. I don't know whether that means all foreign universities or only those which sent special greetings. Even if the latter it seems to me that I should require the help of the Hercules we saw in the play last night to enable me to support the load of such a responsibility. I can only say that if these institutions of learning had sent representatives, they would doubtless have been able to say the other things which I have been obliged to leave to your kindly imagination.

On behalf of the University of Cambridge, and of Queen's College, Cambridge, England, and on behalf of McGill University, Montreal, Canada, I beg to tender the most cordial greetings and to express the hope that continued success may mark the new regime upon which this great University enters under the distinguished presidency of Dr. James.

RESPONSE FOR STATE UNIVERSITIES

JAMES B. ANGELL, LL.D

President of the University of Michigan, Ann Arbor

We have been accustomed to congratulate each of the seven cities which showed some claims to be the birthplace of Homer, for there was honor enough to divide amongst them all. Some of us who have been in collegiate service for several years have been kept busy in congratulating President James on his successive calls to posts of higher academic honor and the various institutions he has served with so much distinction on their good fortune in securing him. I have sometimes queried whether his itinerancy was due to his Methodist training, which accustomed him to the rule of limited pastorates. But now that his church has changed its rule and granted an extension of successful service, I trust this institution may hope to see him long at its helm, which his gifts and experience so fit him to hold.

On this occasion it seems fitting to recall the fact that the most important chapter in the history of higher education in our country during the last seventy-five years has been that which describes the establishment and development of the state universities. In saying this I do not forget or underrate the extraordinary growth and the vastly increased resources of the older and stronger endowed universities nor the recent foundation of great universities through the generosity of men of immense wealth. But when we remember that every state from Michigan and Ohio to the Pacific coast and from the

Dakotas southward to Texas has been enabled by the gift of the general government to lay the solid foundations of a university, and in most cases by the votes of the taxpayers to build it up into strength, when we see that several of these comparatively young institutions are by the amount of their resources, by their completeness of outfit, and by their number of students rivalling in the most friendly spirit the ancient and renowned institutions of the East, are we not justified in affirming that this is the most striking phenomenon in our recent educational history?

Furthermore, when we observe that these state universities are furnishing education at a rate merely nominal in comparison with the fees of the endowed universities, that they are for the most part in the states in which the population is increasing most rapidly, and in which, therefore, the dominant political power is likely to be lodged, is it not clear that they are to have an enormous growth in the future, and that their influence in shaping the fortune of our nation is likely to be quite beyond our power of computation? If this Central West has any controlling passion, it is the passion for education. For the education of their children men cheerfully pay their largest taxes. To acquire education, the young men and young women cheerfully practice the sternest self-denials to gratify this passion for education. These state universities stand with open doors, inviting these ardent disciples to come and receive their training almost without money and without price. Where in this broad land so abounding in opportunities to ingenuous youth is there a more charming spectacle than these temples of learning which in every state invite them to their halls?

This imperial State started later than some of her sisters in planting her State University. But for her tardiness in beginning she has amply compensated by the vigorous pace at which she has proceeded. Of late years no state has made so generous appropriations for the support of its university. In no other university has recently the increase in the number of students been more rapid. With the immense resources of this, the wealthiest state in the West, at its command, with the obvious desire of the students of this populous commonwealth to flock to its halls, with a Faculty trained for the diversity of education which it offers, under the leadership of a President in the full vigor of middle life, how can we on this auspicious day fail to cherish the most confident expectations of its indefinite growth and prosperity, and how can this great commonwealth fail to register its vow that all reasonable needs of her University shall be met with a liberal hand?

That this may be your happy future is the wish and the belief of your sister state university for whom by your favor I have the honor to speak.

RESPONSE FOR THE UNIVERSITIES OF THE EAST

IRA REMSEN, M.D., PH.D., LL.D.

President of Johns Hopkins University, Baltimore

The Johns Hopkins University sends cordial greetings and hearty congratulations to the University of Illinois, and best wishes for the success of the new President who today is to be inaugurated. Although I am called upon to respond for the universities of the East, I am mindful of the fact that I am not the official representative of these universities. They have not selected me as their spokesman. But I am sure that they would join in congratulatory messages, and I therefore venture to express to you the felicitations of the universities of the East.

The work you are about to undertake, President James, is not new to you. You have had experience enough in the presidential chair to enable you to form a judgment as to what is before you, and you have shown us that you have the qualities of mind that will enable you to work efficiently in the lines laid down for you.

We have difficult problems to solve in education. This is true of all grades and kinds of education, but the circumstances of this day lead our thoughts more especially to the problems of university education. With these problems we in this country have been struggling for some years past, are at present struggling, and are likely to continue struggling for years to come. To one who has spent most of his life in investigation in the field of experimental science, the problems of education seem enormously difficult and unsatisfactory to deal with. We want to know what is best for those who come to us for training. If this could be determined with any degree of certainty, we should all act accordingly. Our systems would be based upon a knowledge of the facts. But our experiments must, and do, leave us in doubt at many points, and so we go stumbling on, doing the best we can, but knowing that we could do better if only we had the means of judging the results of our work.

Some years ago the word college had a fairly distinct meaning in this country. The work done in the college was for the most part disciplinary and preparatory. The graduate was prepared to enter upon the study of theology, or to take up the work of a teacher or of a business man. The number of subjects studied was small as compared with the number now going to make up the college curriculum. On the whole this proved satisfactory. Then came science with its manifold applications, and one by one the different branches of science were added. At first the effort was made simply to give the student an idea of the great fundamental principles of the sciences by telling about them in lectures or by the study of text-books. As a teacher of science I confess to having tried this experiment as many

others have, and I need not here report that the experiment showed that this method is of little value to the student. My own conviction is that the method is of no value whatever, and I believe that is one of the problems of education that calls for no further experimenting. It is worth something to have one problem out of the way. When it became clear that nothing was to be gained by attempts to teach the great fundamental principles of the sciences by lectures alone or by text-books, and the value of the laboratory as a basis for the teaching of the sciences came to be more and more clearly recognized, then the cry for laboratories went up over the land and nothing is more characteristic of the changes in our colleges in the last twenty years than the springing up of laboratories in every nook and corner of the country. I doubt if there were a dozen laboratories all told in the entire country at the time when I began my work as a teacher, and these were all devoted to chemistry. I do not know how many there are now, but I am sure that every college has a number of them devoted to as many different subjects, and there is scarcely a school, no matter what its grade may be, that cannot boast of at least one. While those who have helped to bring about this state of affairs do not, I am sure, regret it; while they feel that much has been gained by the adoption of the scientific laboratory method, the question is often raised whether something has not been lost so far as general education is concerned. That is a hard question to answer. And here we see exemplified the general difficulty involved in pedagogical investigation. How shall we draw our conclusions with confidence? Most of what I have read on the subject does not appear to me convincing. The writers seem to be working the problems out in their heads, drawing upon that never-failing source of information the "inner consciousness" for their facts and arguments. It is probably too early to draw conclusions. It takes time to get together a sufficient basis of facts. But the facts are being accumulated and in time the conclusions will force themselves upon us whether we will or not. As a teacher of science I may say that I believe that the properly conducted laboratory is of great value as a means of general training and that it is highly desirable that every college student should have at least a glimpse of the laboratory. Whether a satisfactory general education can be given by the following of courses in science to the exclusion of those subjects which were formerly held to have a monopoly of culture is another question. I should not care to push the experiment too far. Here, then, is an important problem that is still calling for solution.

Education should help to develop men and women of efficiency, of culture, of character. Is there any particular combination of subjects the study of which is likely to give the desired result? And what weight is to be assigned to different subjects in the curriculum? We have got far enough along, I think, to justify us in saying that,

so far as their educational value is concerned, there are many subjects that stand on a par, that the choice is not limited to a narrow range. But deeper than this is the most important fact of the man behind the subject. Between the two possible combinations, a good subject and a bad man, and a bad subject and a good man, it would not be difficult to choose. By bad man I do not mean one who is bad in the ordinary sense, but one who is bad in a pedagogical sense.

I recently listened to a rather pathetic address. The speaker with tears in his voice deplored the modern tendencies in college education, holding that while in the older colleges the object in view was the development of character, in the modern colleges the object is to develop the power of work. The inference was not quite clear to me, but as well as I could judge it was this, that there is a kind of education that develops character and there is another kind that does not. Neither was clearly defined. Now, I should like, all of us would like above all things, to know just what that kind of education is that develops character. That is the kind we want in our schools and colleges, for it must be acknowledged that judged from the point of view of character the products of schools and colleges often leave much to be desired. It is questionable whether the nature of the subject studied has much to do with these results. Physics properly taught and mathematics properly taught probably have as good a moral influence upon the student as Latin or history or philosophy or any other subject commonly classed under the head of the humanities. The essential thing is the proper teaching.

Probably these is some reason for the accusation that, in consequence of the influence of our universities, our colleges have shown a tendency to become schools for specialists. Our college teachers to a large and increasing extent have received their training at some university. They have spent years in special and advanced studies, becoming more special and more advanced as time progressed, until their attention has been fixed for a year or more upon some comparatively small point which has been the subject of a research. Then they have been labeled doctors of philosophy and sent out into the world to take up the work of teaching. During the last quarter of a century the graduate courses and their products, the doctors of philosophy, have revolutionized teaching in our colleges. The result has been the introduction of university methods into the colleges. While, on the whole, this change has probably been beneficial, it has no doubt had its disadvantages. Courses have been worked out for some of the colleges that have been as nearly as possible like those which the teacher has followed in the university, and the college students are set to work on these somewhat advanced courses before they are prepared for them. I fear there is a good deal of this premature tackling of advanced courses throughout the country. A few years ago a teacher of my own subject in a rather

obscure college said to me: "I have now arranged my work so that those students who select chemistry can do everything that is done in the university except the dissertation. We shall have to send them away for that." The adjustment of our college courses to our university courses is one of the most important problems before us. The present condition is most unsatisfactory. It is almost intolerable. What ought we to do? We have a number of answers, but no one answer appears to be so much better than the others that it is generally accepted as furnishing the desired solution of the problem.

The question as to the proper adjustment of the college course to the university course touches not only the so-called graduate courses in the non-professional school, but also the courses in the professional schools, and here all along the line rapid changes are taking place. Where it is to end no one can say. It is clear that we are at present in a state of unstable equilibrium.

Finally, a word in regard to the university movement in general. There can be no doubt that there should be a few places at least where those of scholarly tendencies may go for the purpose of developing their powers to the fullest extent. As time advances the demand for such opportunities will increase, but it is a fair question whether too much emphasis has not been laid upon graduate work in too many places. I am well aware that there is no way of regulating the present practice by law. Wasteful experiments will have to continue until bitter experience teaches us the right. The spread of graduate work meanwhile continues until it threatens to do away with the preparatory and disciplinary college work to which we have so long been accustomed. We have been inoculated with a particularly vigorous university virus and the disease has become epidemic among our colleges. We Americans catch new ideas with great ease, and we are apt to run them into the ground. But we also have a saving stock of common sense that gradually asserts itself and saves us from disaster. However unsatisfactory the outlook now may be, we may be sure that by the continued efforts of those engaged in educational work the many problems will be solved, and we welcome you, President James, to the circle of workers with a feeling of confidence that you will give valuable aid. You have a splendid opportunity. You have the guidance of a flourishing university in a flourishing state. The Eastern universities hope and believe that you will make the best use of the opportunity.

RESPONSE FOR WESTERN UNIVERSITIES

FRANK STRONG, PH.D.

Chancellor of the University of Kansas, Lawrence

I highly appreciate the honor that is mine in being chosen to respond in behalf of western universities. For my own institution, therefore, and for all of the universities which I represent, I wish to extend to the University of Illinois our sincere congratulations upon the auspicious event which we are here to celebrate. We hope for you still greater success and still more honorable achievements under the guidance of the distinguished man who is now your President.

In responding for western universities I am somewhat perplexed because President Angell, who of all men is most worthy to undertake the task imposed upon him, has spoken on behalf of the state universities, which without exception are the best equipped and strongest institutions of learning in the West. I am perplexed again because of the uncertain meaning of the word "western." To John Winthrop, Thomas Hooker, in leading his colonists into the Connecticut Valley, was plunging indeed into the far west. When the patriots of Massachusetts and Connecticut in return for services in the Revolution took up military lands in central New York, they, too, were hailed as Westerners. So, indeed, were those who followed the Cumberland road or skirted Lake Erie to the Ohio country and the great State whose University we honor today; and so, again, were the hardy settlers of the states whose western territory is the beginning of the slope of the Rocky Mountains. And finally some years residence upon the Pacific coast has led me to understand the amazement with which the people of Oregon, Washington, and California regard the ill-advised ones who speak of Illinois, Kansas or Colorado as "West." Therefore, that there may be some definiteness in my own mind, I shall for this occasion speak in general for the universities located west of the Mississippi River.

The University of Illinois, Mr. President, is built on the original territory of the United States. You are therefore linked with the earliest years of our country's history. We belong to the new territory about which our fathers dreamed, but which to them was an impossible country. Some of us belong to the immense tract of country purchased through the farsightedness of the third president of the United States—a territory which is but beginning to show what the future has in store for it. Some of us belong to the Oregon territory, whose occupation and conquest are among the most thrilling episodes in the history of the world. Still others of us belong to that great territory which came to the United States through the victories of Buena Vista, Cerro Gordo and Chapultepec.

The University of Illinois belongs to a state which for nearly a

hundred years has been an equal member of this union of states. You are therefore more firmly linked with the past than we are. The state from which I come entered the Union amidst the throes of the Civil War. The state upon her western border was a Centennial state, and the states north and west of her, with two exceptions, were admitted during the period from 1867 to 1896. I even represent the institutions in the territories of the United States which are now knocking for admission at the door of the Union.

We are therefore new and young. We are, like you, a part of the great western movement that has been going on throughout so many centuries. The Persian found his master in the Greek; the Greek in the western Roman, and the Roman in the barbarians of the north and west. Out of that political and social chaos came the little island kingdom still farther west and for so many years the greatest nation in the world. Her eldest daughter, who has succeeded to the primacy, has carried the western movement across our own continent and to the islands of the sea until now the West is knocking at the door of the East and we, as members of the Teutonic race, are treading near the border of the country from which our family of races is said to have sprung. And, Mr. President, from the days of King Darius until now, the West has ruled the world.

The states I represent, Mr. President, are not among the most populous of our country. They are, however, rapid in their development, great in their natural resources, wonderful in their scenery and second to none in the character of the people living upon their soil. Although we are not among the most populous, there are nearly seventeen thousand undergraduate and graduate students in our public universities and technical schools, and nearly thirteen thousand in our private institutions of the same class,—nearly thirty thousand of as strong and noble and capable young people as our country affords. The amount of state aid to higher education in these states is many millions of dollars a year, and the amount is rapidly increasing. The amount of public funds going toward the support of public schools is many millions more, and it has been left for the West to provide free public education for its children from the kindergarten to the university.

These institutions are nearly all coeducational, for the educational movement started by the ordinance of 1787 has developed a new type of institutions in which the girl as well as the boy is given the best opportunities that money can buy. The result has been a new kind of university life; a new university spirit; a better understanding of the sexes; a higher type of moral and intellectual life.

In these western states the denominational school of the old time has passed away. The schools established and controlled by Christian denominations are no longer sectarian in their influence, nor do they

seek to impress upon their students their specific forms of sectarian belief. They are no longer, with few exceptions, denominational schools, but Christian schools in the broadest sense, whose standard is that of the highest Christian culture. In like manner the public universities of the western states have departed from their old attitude of antagonism to religious life and development, recognizing as they do, that our common Christianity is the basis of our civilization, of our family life and of our university discipline. They, too, have come to regard the highest Christian culture as the basis of university life and control, and among no class of institutions is the university life sounder and purer and more wholesome and more spiritual than among the state institutions of the West.

There is also noticeable among us the beginnings of a unifying movement which shall lead private institutions under the guidance and leadership of the state universities to coöperate in every reasonable way for the educational development of the state in which they may be located. This movement, Mr. President, is destined to be of great value to both state and private institutions, and with the exercise of wisdom and generosity will lead to a higher type of educational life.

I have said, Mr. President, that we are new and young, and so we are. We have the strength and the weakness, the advantages and the defects that arise from that fact. We have alertness, power, self-confidence and mental vigor. On the other hand, we have the lack of polish and stability that come with age. We are not bound to the old because it is old, and yet, on the other hand, we are sometimes in danger of embracing that which is new simply because it is new. Because we are young we lack traditions, and on the whole we are thankful for it. The lack of tradition allows us that freedom which is the very breath of life of true education. It is because of this freedom, Mr. President, that the western universities of which you are a part have made such strides in the last fifteen years. It is because of this freedom that we have alertness, and courage, and mental vigor. It is because of this freedom that we are developing men of ability, unselfishness and power. The very breadth of our plains and greatness of our mountains react upon the lives of our young people. The sunshine and vital strength of the air they breathe make independence necessary and undue restraint impossible. We are free, Mr. President, because we cannot help ourselves; it is in our blood and comes down to us from many generations of pioneers and patriots.

And lastly, Mr. President, we are loyal to our country. Nowhere does the fire of patriotism burn more brightly, and it is the high patriotism that demands purity in our national life and the overthrow of the sordid commercialism that is making our people money-mad. We are democratic in our instincts. Nowhere is there less account

taken of anything but the actual worth of the individual; nowhere is there more of the true democracy which is the state of mind and heart that leads to a real belief in the brotherhood of men. We are altruistic in our ideals. The students in our universities can be relied upon for the highest and noblest standards of political and social life without counting the cost in dollars. They will be found not only supporting but demanding obedience to law, faithfulness to public trusts, integrity in official position, and a square deal for all men. We are sound in our moral and religious life and we can be counted on for the fundamentals of the religious faith that has come down to us from our fathers. In other words, Mr. President, we share the high ideals and purposes of this great University, and your sister universities in the vast territory west of the Mississippi once more bid you God-speed.

RESPONSE FOR SOUTHERN UNIVERSITIES

EDWIN B. CRAIGHEAD, LL.D.

President of Tulane University, New Orleans

Thrice happy am I to be with you today, for New Orleans and the South are at the end of a hundred years war—they shall never have another yellow fever epidemic. They have demonstrated to the world a scientific truth, which, if known a hundred years ago, would have made New Orleans a real world metropolis, and saved to the South, not only thousands of valuable lives, but more money than has ever been spent upon all the scientific institutions and universities of the Republic. To the university-trained man we are indebted for this triumph over a disease that once was fitly called the awful Southern scourge. To the university-trained man, and to him alone, we must look for leadership in a fight to a finish against tuberculosis and cholera and all other diseases that have desolated the world. It is to the university that humanity must look for light and guidance in its onward march to better things. For this reason, not Tulane alone, not the universities of the South alone, but the universities of the North and of the East and of the West and of the world, yea, all civilized men, of whatever tongue or creed, rejoice today with the friends and alumni of the University of Illinois and wish for its new President long life and abundant success in the great work which he has so nobly begun. All real universities are engaged in the same sacred cause, to furnish a larger and larger life to larger and larger numbers of human beings. For Illinois to succeed is not for Louisiana to fail, for Illinois' success is Louisiana's and the South's success and humanity's success. For the work of a great university is not confined to the city in which it is planted nor to the state which claims it as her own. Its work is as wide as the world, as enduring as civilization,

"Lofty as the love of God,
Ample as the needs of man;"

for it deals not alone with the local and temporal, but with the universal and eternal.

It is fit, therefore, that on this great occasion all universities, all lovers of light and learning, should rejoice to send hither their representatives; but there is a special reason why I, as a representative of the South, should find here congenial company, for in the South was established the first university sustained and controlled by the state. In the South the state university first found a congenial home, a not unfriendly atmosphere. Of the thirteen original colonies only five have universities and of these all save one are in the South. In the South was established the first real American university with elective courses and without a fixed, uniform, mediæval curriculum—the University of Virginia, in which should be taught, said Jefferson, "every branch of knowledge, whether calculated to enrich, stimulate and adorn the understanding, or to be useful in the arts and sciences and practical business of life." Slowly, sometimes stubbornly, reluctantly, have our great Northern universities been creeping up for a hundred years to the high ideal of the university set by Thomas Jefferson. The state university is, after all, the most splendid and enduring monument of Jeffersonian democracy. The great party which he founded may be doomed to hopeless defeat and disruption—it has little chance to suffer from corruption—or robbed of its staunchest champions, for Mr. Roosevelt will in a few days invade the South, and there are among us thousands who believe in Roosevelt and consider him the greatest democrat since Jefferson. Political parties change names or disappear, and such may be the fate of the party founded by Jefferson, but in the establishment of a system of general instruction which "reaches every description of our citizens from the richest to the poorest," and in the foundation of state universities, institutions of the people and for the people, we behold, and as long as this Republic endures our children's children shall behold, the triumph of Jeffersonian principles and springing therefrom in unwithering beauty the topmost flower of American democracy.

It is true that Jefferson, the greatest educational statesman of the New World, did not live to see the full fruition of his hopes, nor did "Virginia's grand, imperial man," the immortal Washington, who, anticipating by a hundred years the plans of Cecil Rhodes for Oxford, labored for the foundation of a great national university. Such an institution, he hoped, would bind together the discordant sections of the Republic and secure for it intellectual, as well as political, independence—an institution, which, in time, might have made real the dream of Bacon in his *Nova Atlantis*, who saw in the far West a university, the end of "whose foundations was the knowledge of the causes and secret notions of things, and the enlargement of the bounds of the human empire to the effecting of all things possible."

Finally, in the South was established the first real university with graduate courses and departments of research—a university that revolutionized the whole field of higher education—whose influence, Dr. Harper tells us, has been most potent—The Johns Hopkins University of Baltimore. Why Dr. Remsen, president of this great southern university, came here as a representative of eastern institutions, he has already had the goodness to explain.

Imbued with the spirit of the South's illustrious champions of education and democracy, I come to you, not as a Southerner, but as an American; and I beg of you to think of us no longer as aliens and as lovers of mob law and violence, but as friends of the Republic and as coworkers in the great commonwealth of letters.

RESPONSE FOR UNIVERSITIES AND TECHNICAL SCHOOLS OF THE STATE

HARRY PRATT JUDSON, LL.D.
Dean, University of Chicago

On behalf of the technical schools and universities in Illinois which are of private foundation I bring greeting to the State University on this auspicious occasion. It is an idle and superficial view of the matter which considers institutions of this character as competitors in the sense, as in certain forms of business, that the success of one is at the expense of others. On the contrary, these forms of what perhaps I may call the highest education are in fact of necessity allies—each is a positive benefit to all the rest, as all make together for their common purpose. Their true analogue is not commercial rivals striving each to grasp as much as possible of a limited field of business, but rather separate bodies of military volunteers operating against a common enemy, and this enemy—ignorance—is the ancient foe of all social welfare. In this war there is room for all who sincerely love the enlightenment and the progress of humanity—there is no room for the petty jealousies which mark little minds.

This I believe to be eminently true in educational finance. In a late report of the national Commissioner of Education there is record of benefactions from private individuals to higher institutions of learning in the year 1900-01 amounting to \$14,016,998, distributed among thirty-three institutions, each reporting gifts of one hundred thousand dollars or over. These institutions, without exception, were on private foundations. While we are well aware that there have been considerable gifts to state institutions, still these at the most are comparatively small, and, knowing the conditions that usually prevail, it is surely safe to infer that, had it not been for the institutions which as a matter of fact benefited by the gifts, there would have been a loss

of the whole amount to the cause of education. On the other hand, there is little reason to suppose that there would have been any spontaneous uprising on the part of taxpayers demanding a corresponding increase of their burdens for a similar enrichment of state institutions.

As things have turned out, however, the great beneficence which of late years has enriched the coffers of private schools and universities has, it is well understood, by no means, hindered liberal appropriations for the support of institutions maintained by the state. Indeed the rapid development made possible by private benefactions has been a vivid object lesson which it is said has not been lost on legislators. It is perhaps not too much to say that the generosity which has established Stanford and Chicago among universities, Armour and Bradley and Lewis among technical schools, has thus indirectly been the means of providing other millions for the state universities. Thus has beneficence been thrice blessed—it has blessed those who have given and those who have received and their neighbors also.

It will further be admitted, I think, that the rich endowment of the private technical schools in our State has on the whole been far from lessening the number of students who have thronged to the excellent technical schools of the Illinois State University. Each of these private foundations has been the means of opening the minds of many young men to the idea of technical training. Where possibly one young man has been attracted from going to Champaign, doubtless many have been turned to technical professions who otherwise would not have dreamed of such a life, and of these the State University has had its full share. In short, all combined have merely prepared for the various engineering vocations an increasing number of students, and all combined have not been able to supply the growing demands of our complex material energies. As the nation becomes richer and as its resources progressively unfold there is a steadily multiplying call for trained intelligence, with which as yet the schools cannot keep pace. All the schools are needed.

If this is true of technical schools, far more emphatically is it true of universities. Of course by a university I mean here not an army of students, nor merely a federation of schools. I use the term in its highest modern sense as implying an institution whose primary purpose is research—the discovery of new truth. Of such institutions there cannot be too many, nor can they be too richly endowed, whether from public taxes or from private munificence; and this because on all sides the call for investigation is daily more pressing. Science as it broadens the circle of the known ever comes into more multifarious contact with the unknown. As we painfully learn one new principle we at once find that we must know a dozen others, each pressingly grave in its import on human life in its environment. All which the state can do, all that can be done by private wealth, will still not be

enough. The nation which does not devote every energy to the tireless exploration of every field of possible knowledge is already decadent. Facts in recent history bearing on this truth are too significant even for mention. We can look for no richer return on any of our funds than on those which we devote to scientific research. We need for this the funds of the state, and also the funds of all who will give.

Again, a sound social philosophy will hold that state and private foundations for these high purposes are mutually interdependent. The two poles of modern society are the organized state and the individual. Excessive control by the state is tyranny, and tyranny means spiritual death, the decay of every vital force. Excess of individualism is anarchy, and that means the dissolution of the social bond and the disintegration of civilization. We need the state and the individual each in vigorous life. Thus in the higher training and in the pursuit of knowledge the institution on private foundation needs the example of the stability of that maintained by the state, while the state university is supplemented and stimulated by the free spirit of the private institutions. The two together, then, fulfill the best ideals of the republic.

It is from this point of view that, on behalf of the private technical schools and universities of the State, I bring greeting today to our State University. It is our university also, for we too are sons of Illinois. We gladly congratulate you on the wise leadership which today is formally inaugurated. No one, I think, knows better than I the higher ideals, the large purpose, and the intelligent energy of President James. If, moreover, any apprehensiveness has been aroused in your minds by the uncanny suggestion of President Angell, it seems to me that it may be allayed. I trust and believe that your freshmen have not learned the cigarette habit. I am convinced that your President has not yet formed the inaugurate habit. It is for you to keep both from these unfortunate ways. And we heartily and unanimously urge on the authorities of our loved commonwealth here present that they give to our State University careful and thoughtful attention, generous and wise support. In giving to it they give to all; better, they give to the great cause for which all are jointly working, the cause of sound learning and scientific advance. In these, more than in corn and cattle and railroads, lies the true wealth of Illinois.

RESPONSE FOR THE COLLEGES OF THE STATE

CHARLES H. RAMMELKAMP, PH.D.

President of Illinois College, Jacksonville

Corn and colleges are the pride of Illinois. The greatest corn-producing state of the Union has also been most prolific in producing colleges. Like Ohio and Pennsylvania, Illinois is the mother of a numerous progeny of small colleges. It is therefore, Mr. President, from a large family that I bring you this morning cordial greetings and best wishes, and I know that I speak not only for the institution which I represent directly, but for every college of the State, when I wish you God-speed in the great work which you are undertaking. The colleges of Illinois rejoice that a man of your intellectual attainments, executive ability, and broad sympathies has been called to the presidency of the State University, and they look to you with hope; nay, with more than hope, with confidence, that under your wise administration the University of Illinois will pursue a policy that will advance the general educational interests of the whole State. As a representative of Illinois College it gives me peculiar pleasure to bring you greetings this morning, for it was a member of our own early faculty, Jonathan B. Turner, who was a pioneer in the movement for the establishment of state universities and a member of the first faculty of the University of Illinois. Therefore, just as Illinois College aided, as it were, in founding the State University, so today she rejoices in the prosperity which has come to the institution and in the bright promise of its future.

The relation of the colleges of Illinois to the State University involves, it must be confessed, a large and difficult problem. The conditions in our State are peculiar and different from those existing in many other states. In such states as Wisconsin, Michigan, Minnesota and Nebraska there exists but one large institution of higher learning, and that is the state university: nor is the number of smaller colleges in those states large. The result is that interest and effort center largely in the state institution. It is the only real university in the state. The problem is comparatively simple, for it involves only the relation of a single large institution to a few smaller ones. The practical solution of the problem there is that the state university dominates the whole educational system of the state, but in our own commonwealth the conditions are different and the problem is not so simple. Instead of one large institution we have at least three, and instead of ten small colleges we have over thirty. We may as well not close our eyes, then, to the fact that a perplexing situation confronts us; it will be best to face the issue squarely. We may not be able to settle the question in a day, or even in a year, but a frank discussion will greatly aid towards a proper adjustment of our rela-

tions and a mutually helpful settlement of our difficulties. It was Matthew Arnold, I believe, who said, "It is better to discuss a question without settling it than to settle it without discussing it."

It is not to be denied that there exists in many of our states an antagonism between the colleges and the state universities. Says a well known and well informed educator of a nearby university, "The source of greatest trouble to many of our small colleges in the South, and especially in the western states, is the state university. Slowly the influence of this institution has gained ground until in some states it has become almost impossible for the colleges to continue their work with satisfaction. So strong has the antagonism come to be that in more than one state the smaller colleges have joined in an alliance the object of which is to meet the rapid encroachments of the state institutions. In the whole of the Mississippi valley there are not more than two or three non-state institutions which today do not stand in actual fear of the state institutions."

The small college has been assured by kind, frank friends that it is in danger of freezing to death in the shadow of the state university, and so it has not always felt kindly towards the body which casts the shadow. In the course of discussion, and more especially in the course of the keen, practical competition for patronage, hot words have been spoken, angry blows have been struck, some of them, I fear, even below the belt. Is it then really a struggle for existence, and is there no avenue of escape from the mean, jealous antagonism that seems to be manifesting itself in some quarters? Let us see what the real or supposed grounds of antagonism are.

The question of the college and the state university involves two sets of problems. First, those growing out of the relation of colleges and universities in general, and secondly, those arising from the special relation of the colleges and the state university. Thus the relation of the colleges of our State to the State University is part of the greater problem of the college and the university. Far be it from my purpose at this time to attempt an elaborate consideration of the larger problem. That the college is in a stage of transition needs no proof; nor need it be explained that in this process of transition the college has undergone and must still further undergo many fundamental changes. Pressed between the upper stone of the university and the nether stone of the high school, the college, once the crowning glory of our educational system, is losing its earlier form and character. The colleges with their decreasing endowments and their increasing deficits find it a heart-breaking race to keep up with the universities with their millions of endowment and magnificent equipment. The college numbers its students by hundreds, the university by thousands.

But besides these difficulties which characterize generally the relation between the college and the university, further special

problems arise out of the relationship of the state university and the college. If the feeling of fear or hostility on the part of the college towards the privately endowed universities has been great, still greater in many quarters has been the antagonism towards the state university. The reasons for this attitude are several. In the first place, it has been charged that the state university fosters an irreligious spirit, and the friends of the small church college, ever anxious for the moral and religious salvation of the young people of our land, have looked with fear at the large state universities without compulsory chapel services, with inadequate courses in Bible study, and with no official sanction of religious effort. Not a few pastors and other well intentioned persons look at the state university as a place that fosters infidelity. Secondly, the absence of tuition charges at the state university makes it a keener competitor than the privately endowed institution. The small colleges usually appeal for patronage on the ground that they can furnish an education at cheaper cost than the larger universities, and in comparison with the private institutions this is undoubtedly true, for in most instances their tuition is twice and in many cases three times as high. But in comparison with the state university the appeal loses much of its force, for although living expenses and fees may be higher, tuition is free. The keener the competition the stronger the hostility is apt to be. In the third place, the state university is a very keen competitor because of what may be called its public position. It is virtually a part of the system of public education and is so very closely allied to the public high school that the stream of students is naturally turned towards the state university.

These, then, are some of the problems. Do they imply that it is a battle to the death, a fight to the finish, the finish of the small college? Must there be antagonism, and is combined effort for the great cause of education impossible? No one would seriously contend that the death-knell of the small college has been sounded. There seems indeed to be a reaction in favor of the college. The mission of the college in the educational system of the country may not be what it was a half century ago, but it still has a noble work to perform which no other agency can accomplish. The recent magnificent gifts to the cause of the college are but the evidence of a practical faith in a just, worthy, permanent cause. I hope and believe that we shall also discover that the grounds of antagonism between the college and the state university are more imaginary than real, and that combined effort is both possible and desirable.

Each institution has a wide field and a worthy mission, and if the friends of each will only appreciate better the exact nature of that mission, misunderstanding will cease and harmonious effort can prevail. Many of the difficulties arising from the keen competition for patronage will vanish if we only always recognize that there is an

object greater than the success of any particular institution or class of institutions. That object is the general educational progress of the state, and with this higher aim clearly before us, the petty misunderstanding must roll away.

The small colleges with habits and traditions of a long past, will have to adjust themselves to the new conditions, and those which refuse to recognize that conditions have changed will simply miss their opportunity. Let us reason together and be mutually helpful. Although it will doubtless remain a fact that the small college, if it is true to its highest ideals, will offer the better opportunity for moral and religious training, it is absurd to call the state university a nest of infidelity. As long as state universities have on their faculties, as they now have, men of high Christian character their influence must be good. The small, the good small college, does not fear the continued growth and prosperity of the state university. Most cheerfully does it surrender to the state university the whole field of technical, professional and graduate instruction. The state university may attract thousands of students, but there always will remain some, and their number is large, who prefer the smaller college nearer home. The close connection between the state university and the high school may decrease the patronage of the college, but how small is this danger in view of the good influence which the state university is exercising in raising the standard of work in the preparatory schools.

We are interested in the progress of the State University because it is a public institution. It has the sanction and support of the public opinion of our commonwealth and we unite with all good, patriotic citizens in wishing it a success that shall place it in the front rank of American state universities. Its glory is our glory. We rejoice in its success because the institution is part of a most wise and beneficent system of federal aid to education. We rejoice in its progress because that means the advancement of the general cause of education in Illinois. Rivalry between the colleges and the State University will continue, but let it be generous; let it not degenerate into antagonistic jealousy.

Once more we offer our sincerest congratulations to the new President. We view with pleasure the probable results of his administration because we know that his varied experience and generous sympathies have prepared him thoroughly to understand our problems. Furthermore, his public utterances and his policy as president of one of the largest denominational universities in the United States give the friends of the college the utmost confidence in him. Again the colleges of Illinois wish him God-speed.

RESPONSE FOR THE NORMAL SCHOOLS OF THE STATE

JOHN W. COOK, LL.D.

President of Northern Illinois State Normal School, De Kalb

It is my agreeable duty today to be the bearer of the cordial and sincere greeting of the state normal schools of Illinois to this young, vigorous, and expanding University.

While I have no official credentials from those whom I am to represent I am sure that I shall do no violence to their feelings in what I am about to say. So far as I am informed, and I believe myself well informed in this particular, there is but one sentiment among the members of the boards of control and of the faculties of our normal schools with regard to the University of Illinois. The policy of the University has been so liberal, so free from academic prejudice, so willing to concede to the normal schools all that their most partial friends could justly ask, that the spectacle, so often and so unhappily presented in some of our American states, of discordant and warring factions in public education has never been witnessed in Illinois.

It is an interesting fact that the existing arrangement by which the graduates of the state normal schools are received at the University was originated and put into operation by the University Faculty without any solicitation on the part of the normal schools. They were well understood within the official circles of the University. Some of the men to whom it is indebted for its honorable repute were from the benches of the normal school, while others had served in its faculty. When the University said to the normal schools, "If your matriculates are prepared to enter all of our courses without conditions we will give to your instruction full recognition," it dignified their faculties by elevating them to university rank, and thus threw upon them the responsibility of meeting their consequent obligations.

This attitude of the University has told most significantly upon popular elementary education. In the course of ordinary events it will happen that some of its graduates will become teachers. They will gravitate by natural preference to the secondary or higher schools. But the normal graduates that seek these class rooms have selected education as their life work. Moreover, they have generally been attracted to elementary education by the impulse which they received from the normal schools. Its problems have awakened their warmest interest. They have discovered their difficulties and their tremendous significance. They have made the further interesting discovery that these problems furnish a field for the exercise of the best capacities of the most generously endowed minds, and that the American public is quick to recognize and reward the men and women who are able to solve them in a superior way. Impressed by these considerations large numbers of them are going to the University for that better

equipment of which they keenly feel the need. They are to be the prophets of a new educational dispensation, and with characteristic ardor they press themselves against the disciplines of the University in order that they may suitably prepare themselves for this fine service to the children of this noble commonwealth of which we so proudly declare ourselves citizens. I regard these conditions as of immense import to the life of the time and I must confess myself unable to see where the University can touch the masses of the people in a more fruitful and inspiring way. It goes without saying that through the influence of these cultured teachers, every one of whom will be a propagandist for liberal culture for the common people, countless highways will be opened from the elementary schools to the University, thus enormously enriching our common life.

In many ways the University has been peculiarly fortunate in its executive heads. They have all been men who believed in the whole people. They were free from that mediævalism which forever strives to separate the cultivated man from his less favored fellow. The first president was not only a man of splendid intellectual capacity and fine training, but he also understood the elementary school, having served as superintendent of public instruction in one of our western states. It interested him profoundly, and the constant and close affiliation of the University with schools of lower grade is due in no small degree to the impulse in that direction which he gave during his long management of its affairs. And who that heard his addresses on popular education can ever forget them! They have never been surpassed and have rarely been equalled in the educational history of Illinois. His successor in office was full of the same spirit and had served a generous term in public high schools. And when an interim occurred and events needed to await the selection of a new president, the man of all men connected with the University, who was the unanimous choice of the Board of Trustees to hold the reins of power temporarily, began his professional career as a teacher in an elementary school and also trained himself for his work by the disciplines of a state normal school. The man who last retired from the presidency to take up the duties of the most commanding educational position in America, had been a superintendent of public instruction in the Empire State and came to the University from the head of a great city system. He thus added to his fine native capacities and his generous culture the experience of years in the closest relations with elementary schools.

Nor have I forgotten the dominating idea that was in the minds of those who deserve the distinguished honor of founding the University. It came from the warm hearts and the fertile brains of men who sincerely and zealously sought to join in a fine unity labor and learning, and thus to enrich by a noble and practical culture the lives of the

common man and woman. The University has been true to the spirit that brought it into being. Its expansion has been along the lines which its founders contemplated so far as their vision foresaw the possibilities and demands of the modern world. If they are permitted to revisit the scenes of their earthly life, with what satisfaction they must view the surpassing revelations of modern science and the ministry to our common life through their adaptation to the service of man by the University. Nor have the more distinctively spiritual needs of men and women been forgotten. A fine idealism has kept step with the development of the great agencies that make for material prosperity and it has not been forgotten that man cannot live by bread alone.

The latest born of the colleges of the University appeals with especial force to the normal schools. Under the present organization of those institutions their main function must be the preparation of teachers for elementary schools. The crying need of the time is a sufficient supply of trained men and women to equip the rural, village, town and city schools with competent managers and teachers. There is no public interest that is managed with such slight regard for the most familiar economic principles. While it is true that a notable gain has been made within recent years, there is no other country of our rank that does not overshadow us in this particular. The recent educational legislation in England aroused more popular interest than the economic leanings of the ministry. France and Germany are generous competitors in their efforts to professionalize their teachers. The dreadful war, now so happily ended through the intervention of our wise and humane President, is a thrilling chapter in the story of the education of a race.

But we are now in the greatest need of an institution for the education of experts on the basis of university education. The call for special teachers of manual training, domestic science, art, language, agriculture, is loud and insistent. The demand is far greater than the supply. Every county superintendent of schools should be equipped for his work by a specific discipline. Reflect for a moment upon what is possible with a man or a woman with such a preparation in every one of the one hundred two counties in Illinois. We believe in the principle of supervision, yet we are careless as to the qualifications of our supervisors. Every village, town, and city must have its principal or superintendent in the interests of common economy, yet the majority are without the training to make them efficient. We hail with pleasure the advent of the new School of Education. Let it be generously equipped and enthusiastically supported. Let its administration be so skillful that men and women aspiring to the highest skill in teaching and to the completest mastery of modern educational problems will not need to go to the older East for instruc-

tion. Let it be the generous rival of the School of Education of the University of Chicago, the two institutions arousing each other to a noble emulation in a great cause.

The occasion that calls us here today is full of interest to the men and women of the normal schools. It is thirty-seven years since my attention was especially attracted by a studious lad who sat in one of the forms of a room under my charge in the training department of a normal school. The only reproof that I can recall ever having given him was for too close application to his books. I have heard him occasionally indulge himself with certain anecdotes that do not exactly square with that statement, but they rather illustrate the growth of the myth than contribute to historical verities, I suspect. It was in that institution that he fitted for college and at sixteen engaged in successful debate with men of twice his age. I often thought that he was predestined to skip the period of youth because of the soberness and severity of his mental inclinations, but I have since discovered that he was only deferring it in order that he might make it perpetual. I need not here recite with what fondness those of us who were his teachers followed his career as he availed himself of the disciplines of great universities, and by the patient investigations of former and existing economic conditions, by a masterful grasp of the genius of the land of his nativity, and by a fearlessness and vigor unsurpassed among modern scholars fitted himself for notable service to his time. We know that he understands the significance of the university in our modern life. Those of us who are responsible for the management of normal schools know that he understands our problem as well and the problem of the secondary and of the elementary school. We most cordially approve the wisdom of the Board of Trustees in elevating him to this high office which he is so admirably fitted to adorn, and we hail with peculiar satisfaction this interesting event which officially and formally endows with authority a man to whom we are joined in bonds of the warmest personal affection and for whose genius and scholarship and commanding character we have the profoundest admiration.

RESPONSE FOR THE HIGH SCHOOLS OF THE STATE

JAMES E. ARMSTRONG, A.M.
Principal of the Englewood High School, Chicago

I regret very much that my collaborer and associate, Mr. Buck, is unable to be here today; but it is a great pleasure to me, as a representative of the high schools of the State, to extend to President James the cordial greetings of the high schools of the State. I am sure if they could have a voice here they would give an effective address in the expression of their confidence in the ability and attainments of

the President of the University to care for the educational affairs that will be entrusted to him here.

The high schools of the State occupy a rather peculiar position in the State educational system. We stand half-way between the common people and the university people of the State. We find ourselves drawn so strongly from above and below, that we think sometimes our very existence is threatened. We find some consolation, however, in the fact that we have all the good things to be derived from the experience of the common people, as well as the inspiration of the university above us. We have the interest of both at heart. We look to the university for the inspiration that leads to the higher ideals of scholarship and usefulness, while we keep in mind the peculiar needs of the communities in which we are placed. We come to the university naturally for friendly criticism and assistance; and the universities not only of our own State, but of the adjoining states, have given us great assistance. But we must look especially to the University of the State of Illinois in its official relation to the schools of the State. We need the assistance of this University. We have great confidence in the man whom the Trustees have so fortunately selected for its head—the man who has had experience in all the schools of the State, who knows them thoroughly from the kindergarten to the university; who has gathered up in his experience the best things of the universities of the world and brings them to the service of this great commonwealth; I am sure the high schools of the State will be only too glad to coöperate with president James in his efforts to advance the interests of education here. We greet him cordially, and wish him the greatest success in carrying forward this work, and hope the time will come when his ideals will be accepted throughout the State; and when the influence of this great University in scholarship and culture as well as in practical things shall be felt throughout the length and breadth of this great State.

RESPONSE FOR THE ELEMENTARY SCHOOLS OF THE STATE

HONORABLE ALFRED BAYLISS, A.B.

State Superintendent of Public Instruction, Springfield

During the last year for which we have the figures, the public school enrollment in Illinois reached a total of 978,554. More than four and one-half per cent. were enrolled in, and about three-tenths of one per cent. graduated from high schools of varying degrees of efficiency. The high schools, except in thirty-six cases out of a total of four hundred and fourteen, are composed of the last three or four grades of the common schools in the district. But seventy-seven of them are in separate buildings. It is a moderate and fair statement to say that all of them do some, and most of them do considerable

first-rate secondary school work. Nearly three-fourths of them are "accredited" to the University. Upon the elementary schools in the high school districts, it is evident, therefore, that the University may and does exert an important direct influence; because, though its immediate contact is with the high school, all grades share every real benefit thus derived. The chief service performed by the high school is probably its uplift to the grades below. By way of the high school the University may send the roots of its influence deep into the soil from which its growth must finally come.

But there are others. More than one-third of all the elementary school enrollment is in the isolated one-room schools out in the country. Many of these little schools are quite as good as the best elementary schools. Here and there among them are veritable little Drumtochty's, "having their own distinction, for scholars were born there,—" and masters who see to it that the trail is kept open between them and the nearest high school. Except that any sort of square deal would make the high school door swing free for them, they, too, find themselves within the direct current of University influence. But these cases are the exception. In the nature of the present conditions, they must be. In eighty-four different counties of Illinois monthly wages of teachers go as low as twenty-five dollars, and the average annual stipend of teachers of this class falls below three hundred dollars. In these schools, accordingly, are practically all of the 4,428 teachers with no school education beyond the eighth grade, as well as most of the 2,455 others who have had the advantage of less than any full high school course. What right has the public, or this University, to look for trained or otherwise qualified teachers under such conditions? If we add to the children in these schools those who are in the small semi-graded schools, but without direct high school relations, we shall have more than half (four hundred fifty thousand pupils) in elementary grades who are as yet without free high school opportunities. For these children the wires which bear the current of University influence are broken. Without violating the principle that the first care of the whole common school must be for the common needs, the University may affect the tributary grades of the strong accredited high school to their mutual advantage. It is not easy to see how it can so directly aid the others. Some adjustment of relations to this large number, however, is a duty of the University, if it is proposed to occupy and cultivate its whole field. For the schools it is merely fair play. For the State it means everything that free education can mean to fully one-half the people. To relate the University to the smaller elementary schools, as it is now related to the larger ones, is the problem of most immediate importance in Illinois.

Every highly trained man is a valuable social asset. There never will be too many. Extraordinary characters will be produced by

the schools, or in spite of them, in the future as in the past. But more important than either great scholarship or "genius" to the general health and strength of a democracy, is the high general average of qualification for good citizenship. That the number who receive the amount of training represented by a complete common (high) school education can ever be too large is not conceivable. No formative agency of public opinion can do more than the University to set up the standard. None is more willing to do all that can be done to make opportunity free and equal.

Again, not everything is teaching that goes by that name. The school districts paid for teaching last year nearly thirteen million dollars. The totals look large, but, as was said, the sums paid to individual teachers were sometimes pitifully small. Was the service paid for worth more or less than it cost? Is teaching an art, trade, or merely unskilled labor? If the teacher is not a skilled workman, who is? Then what should be the honest price of a teacher? This University will study the question, and when it finds a result, will promulgate it in such a way as to enlighten public opinion. The people will pay what they are convinced the best service obtainable is worth.

Why may not the educational experiment station in time take rank with the agricultural and engineering experiment stations? Our knowledge of what constitutes the best educational stuff and the rational methods of using it is far from complete. We can no more afford to waste mind than lands or material. The University can do much to so inform public opinion that a supervisor of education who does not know that mere cramming of the unwilling memory of a little child with unmeaning words does not even impart knowledge, much less educate, will soon be a supervisor out of a job. It may determine some of the tokens by which good teaching may be known, as appropriately as it now teaches the standards of a good ear of corn. It may even, some day, work out the whole scheme of a school of a better type than any we have yet seen, and set it up to be studied as a model.

The overwhelming impression upon the mind of the most casual observer of the university plan and methods must be that all this provision for technical training is regarded here as a legitimate part of the problem of education. How far down the line should that belief operate? Does it affect in any way the processes of the primary schools? The elementary needs of man are food, clothing and shelter. To obtain these for himself is at once the first duty and the most constant limitation. Efficient life begins here. Power here is the first thing to be obtained. Until this primary step in education is taken, all others seem to be out of order. The intellectual measure of this power may not be so very high. Ethically, however, it goes to the heart of the whole question. The home is the corner stone of civili-

zation. Vocation is the support of the home. Does it not follow that elementary education must take vocation, the art of getting a living, into account? Should not active occupations, as educational instruments, travel side by side with the book from the beginning? Should not teachers know how to utilize the constructive and creative instincts of very young children as the right beginning of the training which culminates in the laboratory or the workshop. Will not the University send out supervisors of elementary education with some conception of the relation of these things to the school courses of study?

Those who have to do with elementary schools confidently look to the University for these, and better things. They believe that, in its capacity of general clearing house for educational ideas it will, in due time, announce a better thought-out school policy than we now have. They believe that the University will be the leader in the important work of coördinating the now disconnected and unrelated parts of our system into a harmonious whole.

Because they so believe, the workers in elementary schools are profoundly interested in the events of this historic week. They rejoice with all who rejoice in past achievements, and share every hope of all who believe that the two most potent factors in the extension and improvement of common school education, now in operation, are the free public high school and the free state university.

MESSAGE FROM PRESIDENT ROOSEVELT

President Roosevelt sent the following telegram to the University Trustees:

"It is with sincere regret that I find myself unable to accept your kind invitation to attend the installation of President James. I wish I were able to be with you, both because of my high regard for President James and because of my appreciation of the work being done by the University of Illinois."

ASSEMBLY OF THE COLLEGE OF MEDICINE
THE CHAPEL, WEDNESDAY MORNING, OCTOBER 18

CHARACTER AS AN ELEMENT OF SUCCESS IN THE DEVELOPMENT OF PROFESSIONAL REPUTATION

DANIEL A. K. STEELE, M.D.

Professor in the College of Medicine, Chicago

On this auspicious occasion, when the professional departments of the University of Illinois meet in this assembly hall to play their part in the installation of a new President and to do honor to the University and its distinguished head, it is my privilege to represent the College of Physicians and Surgeons of Chicago—the College of Medicine of the University of Illinois.

I congratulate the University upon the acquisition of such a distinguished educator as President James to guide its destinies and develop its professional departments during a period of the world's history that is marked by phenomenal advances in scientific thought, material progress and professional attainment, and predict that under his skillful guidance the next decade will see our University in the forefront of educational institutions in this country.

At this time when public attention is daily drawn to examples of shattered reputations in the ranks of our captains of industry, bankers, educators and professional men—shattered because they departed from the high ideals of youth and home, honesty and regard for the rights of others—it may not be inappropriate to say a few words to you on the value of character as an element of success in the development of professional reputation. Character is the estimate we place upon ourselves. It is the innate monitor we call conscience. Reputation is the estimate the world places upon our achievements.

Bishop Spalding says: "Our state comes closer to us than our country; it awakens tenderer recollections, weaves about us the tendrils of more gentle and fragrant affections. It calls forth feelings which glow like the dawn, which soften and mellow like the evening sky. It blends with memories of the twining arms of mothers and fathers, of the warm, unselfish devotion of youthful friends. The thought of it is interfused with clouds and showers and the songs of birds, and all the glories of the unfolding world that accompanied us when we were young."

So character is intertwined with professional reputation as professional departments are intertwined with the University. Each is helpful to the other; one cannot exist without the other.

There are certain elements of character essential to professional success. The well educated mind looks beyond the mere semblance

of things into the higher realm of nature's laws and forces and I cannot help but think that our early environments have much to do with our future success. A study of nature and nature's God in early life purifies and ennobles our whole subsequent career.

To him who has been fortunate enough to open his eyes for the first time upon the light breaking over the Green Mountains of Vermont or the rugged grandeur of Colorado peaks, or near the roaring of a mighty ocean or the rushing, whirling waters of a turbid river, there must ever remain an ineffaceable memory picture of nature's wonders; and as his budding brain realizes and appreciates the beauties of the landscape, the ever changing and yet harmonious colors of nature's painting.—whether in field or forest, in graden or on hillside, in the morning dawn or when lit by the glows of an autumn sunset,—his mind cannot fail to be impressed with the grandeur and eloquence of nature's sermons, nor can he help realizing that a higher and mightier power than man rules the universe and directs by an all-wise method the mysteries of life.

Thus imperceptibly, but none the less permanently, he has impressed upon his character by reason of his environment, noble thoughts, generous impulses, and an unconscious religious trend. His mind is unsullied by the murky stream of a city's vileness, that too often dwarfs and destroys the one whose character is not strong enough to resist its baneful blandishments.

In our own College of Medicine it is interesting to note that its founders and leaders had their early environment amid such surroundings as I have sketched.

To succeed we must be in love with our profession. We must have a high conception of its aims and objects; we must idealize our work. Our motives should be the love of science, the instinct of investigation, the desire to search out the secrets of nature, and to alleviate human suffering. We should be a composite picture, blending in our make-up perfect health, mental vigor, manliness, honor, honesty, self-reliance, courage, truth and conscience, with a devotion to high ideals and an unwavering self-confidence. We should be composed of the rich and beautiful material gathered from all ages and places. The true professional man is a mosaic and not a single gem.

Ideals change, but there must be a permanent good—a lasting, beautiful and unchanging truth. The ideal beauty has not yet come in painting, statuary or music, and I sometimes think it never will come this side the dawning of the great millennium, unless we hold closely to the ideals of youth and home, innocence and purity.

The world demands a doctor who is educated all over, who is tender, whose hand is steady, whose eye is clear, whose tongue is clean, whose brain is cultured, whose nerves are under perfect control, one who is broad minded. It wants a doctor whose knowledge of disease

has been broadened and deepened and enriched by a wide experience in general medicine, and sharpened and polished in some specialty afterwards; a doctor who has had a hospital experience, who combines common sense with experience and with knowledge; who has a heart swelling with sympathy for the poor sufferers who seek his aid; who carries a smiling face on his errands of mercy; who prefers substance to show, and who regards his professional reputation as a priceless treasure to be guarded against the alluring temptations of modern society or the tempting bait of gold offered for the prostitution of his talents to the performance of illicit or illegal practices. It demands that he shall possess that innate monitor that we call conscience. Our minds are given to us, but our characters we make, and the molding of them is the noblest work on earth. One's resolution is one's prophecy. There is no future to the man who has no great inspirations.

The value of professional reputation, character and success in the professional departments of the University, is of inestimable value to the University itself. Such departments attract the brainy young men of the State, they add a thousand earnest students to her numbers—add reputation and prestige to the University. They interest the city of Chicago, with its two million inhabitants, in the University; they interest the Legislature in her professional and scientific welfare. They are self-supporting; they are of incalculable value in developing the University along the lines of greatest helpfulness in protecting the lives and the health of her citizens. They are affiliated departments that in the nature of things must become an integral part of the University.

The value to the University of her professional departments is unquestioned; and through all the coming days and years it will be the constant aim of the Faculties of the Colleges of Medicine, Dentistry and Pharmacy to coöperate with the University and our President for the best development of the University, and to develop purity of life, dignity of character, professional enthusiasm and nobleness of purpose—to strive for the highest and best that is attainable in life—that our lives may be broadened and deepened and rounded out into symmetry and beauty with all the God-given faculties they possess.

DENTAL SCIENCE AND THE COMMON WEAL

BERNARD J. CIGRAND, B.S., M.S., D.D.S.
Dean of the School of Dentistry, Chicago

Something over one hundred years ago, while the American colonies were struggling for freedom, a fleet of Frenchmen came to lend their aid to an oppressed people. Among these compatriots was Joseph LeMaire, a dentist, who shortly became the personal and professional friend of Washington. In 1781, while the colonial troops were in winter quarters, LeMaire obtained a commission from General Washington to teach dentistry to those of the army who desired a course. Thus from the hands of General Washington came the order "to teach dentistry." This was the beginning of the instructional career of our profession in America. About forty of the soldiers availed themselves, and six became practitioners. Today we number upward of fifty recognized colleges, publish more than two hundred dental periodicals and have a dental population of twenty-six thousand.

The art and science of dentistry during the past half century has surpassed in progress that of any other vocation, and today it stands among the learned professions. To this happy era in our calling the American dentist has liberally contributed. The glory of establishing nearly all the potent elements of dental progress is the cherished record of the American practitioner.

It would be foreign to the purpose of my paper to recite to you the evolution of dental construction or detail the processes relating to dental technique or progress of digital dexterity as it pertains to our profession; hence I will confine my remarks to dentistry as it pertains to the people in general, particularly from an American point of view.

It might well be said that it is the most exact, or demonstrable of professional callings. There is less of the speculative and hence it excludes the factor of assumption or presumption, since like surgery it deals with material and adds to or displaces matter, being either aphæretic or prosthetic. Its dominion is indeed, apparently constricted, and does not involve great human or physical territory, but its relationships are of so diverse and complicated a character as to involve parts and organs quite remote from the lower third of the face. That our teeth depend largely upon our mental and physical condition none will at this late period of the nineteenth century deny, and that in turn our mental and physical conditions are most decidedly affected by the condition of the dental organs, can be demonstrated; and in this chain of dependence we recognize that all organs or parts of organs are influenced by the surrounding physiological circumstances, and these are acted upon primarily by the food we eat, the vocation we follow and the climate we live in.

Dentistry has contributed to the common weal some of the most cherished comforts of human life and lent factors to the development and progress of the human family. To LeMaire Americans owe the knowledge of implantation and transplantation, the principle which has led to the wonderful physiological phenomena of engrafting of new tissue. The first anatomical museum was founded by Dr. Peale, also distinguished for having painted the famous picture of Washington. To Miller we owe the knowledge of hundreds of forms of bacteria. He gave us light on cell physiology and evolved the scientific etiology of dental caries. Dr. Atkinson took the speechless child, and, after restoring the cleft in the palate, taught the world that where distortion of features and muteness of voice existed, both could be displaced by beauty and eloquence. To Dr. Horace Wells we owe the practical application of nitrous oxide, the finding of which has done more to relieve humanity of its sufferings than any score of other discoveries. Humanity owes so much to this dental genius that he deserves a statue in every center where medicine or dentistry is taught. Sixty years ago, October 18, 1845, Dr. Morton, a dentist of Boston, chemically demonstrated the sleep-producing qualities of ether, and two years later Dr. C. T. Jackson gave us chloroform. Dentists have since produced five general and fourteen local anesthetics.

Mother Medicine fully recognizes the balm brought through these agencies to the afflicted and distressed. These dental practitioners have made it possible for your cosmopolitan centers to possess the beautiful marble lined surgical amphitheaters of today, and have thus opened the way to cranial and internal surgery; they have taken from the operating room the hitching post and straps and bequeathed in their stead "the vapors of sweet dreams."

A noteworthy service of our calling has been the system of post-mortem identification. In criminal annals this form of exact registration has resulted in untold good, leading to the capture of the criminal immediately after the identification of the victim, for without the latter, the former could scarcely be anticipated. Again, in the innumerable railroad accidents and public building calamities, as well as steamer disasters and theater conflagrations, the dental surgeon is indeed rendering great aid to the saddened, stricken relatives and friends. In the Iroquois theater horror more than three hundred dead were given a family burial because of the dental record.

The first instance where a body was given dental identity resulting in personal identification happened in this country something less than a century ago. The great patriot and hero, Paul Revere, devoted much time to the prosthetic division of dentistry. He constructed metal base dentures and was much interested in carving and designing artificial teeth. When the remains of the patriot and soldier, General Warren, were removed from Bunker Hill battlefield to their present

resting place, it was Paul Revere who made the identification, recognizing the partial denture which he had constructed some years previous to the general's death, and minutely described his remaining natural teeth.

Those who are making a study of the science of neurology are free to admit that dental lesions and oral disturbances inaugurate a variety of mental disorders. Neurotic disturbances having their origin in dental irritation do not receive the attention they merit. The dental factors concerned in reflex pains which may be traced and treated in the mouth are surprisingly numerous. Recent investigations point to the fact that in our state asylums are patients suffering a temporary dementia and various forms of neurasthenia, who, in truth, require only dental attention to be relieved. Physical exhaustion, suspended consciousness and other morbid mental states are too frequently induced through neglected oral circumstances. Why not have dentists appointed in these institutions to care for the distressed? Nor does this disorganized dental condition relate to asylums alone. The penal institutions as well are disregarding the comforts which dental science could render.

The general surgeons of today are awakening to the importance of our professional services. In patients awaiting operations involving the alimentary system, the necessity for normal and healthy conditions in the mouth is most essential. The most successful operation would be endangered by even the presence of diseased dental pulp and should there be an ulcerated area or suppurating surface super-induced by a distressing tooth, the life of the patient would be threatened. Hence, surgeons who are alive to these responsibilities, before performing these specified internal operations, do not neglect an examination of the oral cavity; if disturbing tissues present themselves and the operation can be postponed, the patient receives the services of the dental surgeon, thus assuring every precautionary measure. As further evidence of good to the general public, I cite the statement of Dr. Joseph Kidd of London, an eminent English physician and specialist, who attributed the cause of the prevalence of appendicitis to ill attention to the teeth and indifference to the laws of perfect mastication. In this view the medical profession is offering some hope and suggestion which is truly specific.

The morbid influence due to deranged digestion has attracted attention on this side of the Atlantic in the form of the recent book by Arthur MacDonald, specialist in the bureau of education at Washington, D. C. He attributes much of our crime to illness—to abnormal health—and classes distressing and diseased oral parts as a frequent cause for domestic crime. He calls attention to the fact that the poor in our great cities, where crime so freely flourishes, receive practically no medical, surgical or dental aid, and the depressed and suffering

mortals wear out their physical and neural energies in the great fight against pain. The result is that an exhausted, ill tempered mind, lacking the normal control, unable to carry the burdens of excruciating pain, frequently through perverted judgment commits most desperate crimes. Fifty years ago such a statement would have been treated with derision. This emphasizes the necessity of greater care for the dental organs and augments the importance of the science of dentistry.

Why are not the poor of our great metropolitan cities provided with better attention of the physician, surgeon and dentist? These people are burdens of the body-politic and an ounce of prevention would be better than a pound of cure. Later we have them at greater expense as tenants of the county hospital, the poor farm, the industrial institution, the asylum or the dispensary. Would it not be wiser, more charitable and Christianlike to provide at state expense, a method looking to the care of the worthy poor? Today Germany, recognizing the importance in this direction, has in Strassburg, Berlin, Dresden and all large cities, instituted public dental infirmaries, where the government appoints dentists to care for the teeth of the worthy poor, the government providing the institution with all necessary instruments, appliances and material. The children of our public schools should have like opportunities and the colleges of dentistry would gladly, without cost, provide lecturers and clinicians.

The government at Washington is awakening to the welfare of the soldiers and sailors and the common weal is strengthened because of it. Congress will be asked to pass a bill creating naval dental officers. This would add a group of new and useful officers to the American navy in the interest of comfort, health and efficiency of our naval forces. The government should continue in this humanitarian direction. Last year in a single county in our State eight hundred and eighteen infants died from convulsions during the period of dentition. If this same ratio prevails throughout Illinois, what startling figures we could count! And yet this is but one of the many causes of death directly traceable to oral and dental disorders. It does seem that these facts, if known, would appeal to our legislators, who might appropriate a small sum for original research in this most fruitful and promising field.

Aside from this what is being done by the government to encourage scientists to prosecute the study of diseases of infants? We may keep in mind the low birth rate of France—of what avail is a high birth rate with an encroaching and increasing death rate? President Roosevelt has called attention to the childless marriage—thanks for his drastic criticism—but he might have gone into this matter farther and added, "Save the children that are born."

The United States annually spends millions of dollars in the department of agriculture in the hope of arresting the diseases of swine,

cattle and sheep. The government provides scientists with the best of lenses to discover and decipher bacteria and agents of destruction to the animal and vegetable kingdom. But the human family is left to individual enterprise, and disease hovers at every doorstep in the form of consumption, dyspepsia and pyorrhea, allowing a death rate of a most alarming figure. The government could well afford to publish fewer books on cattle and swine and devote a portion of this enormous sum to the redemption of the citizens' health.

If the general public knew the status of affairs as pertains to our present meager means for prosecuting investigations into realms of direct concern to human life, if we could impress the legislatures and even influence the civic authorities with the fact that public funds should go for public good, we would have accomplished an invaluable good.

Let the University of Illinois, her alumni and friends appeal to the Legislature for funds in this direction; give dental specialists an opportunity and the gain will all accrue to the general public—the common weal.

THE STATE PHARMACY LAW

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It affords me pleasure on this interesting occasion to represent the oldest department of the State University—the School of Pharmacy—and not only the oldest department of the University but the oldest science in existence, save one. Men became students of the starry heavens before they applied themselves to the study of nature's products and their application in the treatment of disease; and as the preparation of each potion preceded its administration, so pharmacy antedates even the practice of medicine—by at least ten minutes.

I have no intention of dwelling upon the history of the Asclepiads and their services in the interests of gods and men; not upon that of Hippocrates, the "Father of Medicine," nor upon that of the great leader among pharmacists, Galen, whose father in answer to a dream made a doctor of him; but I will refer at once to the leading light in pharmacy established midway between the Alleghany and Rocky mountains in the infant city of Chicago in 1859.

At that time a few active pharmacists of the city engaged to establish a school with the determination of providing for the systematic training of future apprentices.

The custom hitherto prevailing of the applicant, parent or guardian, paying one or two hundred dollars to the employer in anticipation of the trouble expected in properly instructing the novice was just drawing to a close. Customs which were handed down from one

generation to the next and which may have served a useful purpose, were found inadequate under the more active conditions of American equality and freedom.

The employer being no longer paid for training the aspirant, thought his obligations were at an end, and although he took the boy as an apprentice, it was merely to have some one to do the rougher work at little expense. The one engaged was usually a school boy of very limited advancement, and his engagement, if it did not terminate his scholastic work, was inclined at least to limit his education to the narrow field of personal occupation.

These conditions and their possible consequences were duly considered by those interested, and the conclusion was reached that the apprentice must be school taught to offset the employer's neglect. Application for a charter was made, officers and trustees elected and from among the leading chemists, pharmacists and botanists, a faculty was appointed.

To follow the vicissitudes of the school through war and fire at this moment might not prove of general interest, but as my knowledge of events embraces almost the entire interim, I may be allowed to say, that although the school has made ample provisions for the proper technical training of the apprentice, changed conditions have constantly brought to the ranks the children of poorer and less advanced people, children from grammar grades and private schools, whose advancement in some instances is limited to the barest and crudest rudiments. Preliminary progress is now earnestly demanded before matriculation.

Twenty-five years ago members of this school and others, in order to forestall these and threatening trade conditions, ill-advisedly sought legislation, self-imposed legislation, as a remedy for growing evils. The public never thought of seeking legislation to control the pharmacist. No man ever stood higher in public estimation than he did and no professional man ever enjoyed a greater moiety of confidence than did the old time family druggist; and pharmacists in their efforts to benefit themselves have done more toward destroying this feeling of confidence than has any other influence or all influences combined, and today they are openly charged with substitution and adulteration, and the very word adulteration takes on a new meaning when administered by the officers of the law. The law was enacted and grumbling began; it has been amended but dissatisfaction continues; the results are not what was anticipated by its authors and the I-told-you-so man has had a very long inning.

The pharmacy law has cost the profession one hundred and eighty thousand dollars and the rank and file is not so good today as it was twenty-five to forty years ago. Schools of pharmacy do not refuse matriculation to the illiterate; but having accepted them, refuse to gradu-

ate them when they succeed in answering the examination questions. Some backward students have served four years in this school before being granted a diploma, but most frequently when a student finds himself falling behind he leaves for some other school.

This school, which was the outgrowth of the times, has during its existence introduced some of the farthest reaching and most lasting innovations in pharmacal teaching and in order to raise the standard to the anticipated and long wished for degree, the former members sought admission as a department of this great University, the aims and advancement of which they were all familiar with.

Today we set another mile post in the University history, and today every member of the old Chicago College of Pharmacy is looking toward the new President with a full realization of his strength and determination and unbounded confidence in his learning, experience and capacity. We are hoping through him to have this school justly recognized by the people as the State School of Pharmacy, a part of the great educational institution founded and supported by them; and pharmacists throughout the State, from Wisconsin to Egypt, unless they are perfectly satisfied to continue their efforts to fill the ravenous maw of the State law, and this without benefit to themselves, must, as their only salvation, insist upon the recognition of this as the State School and the one through which that part of the State law relating to educational attainment must be enforced.

The law is supposed to afford the means of testing the qualifications of all who desire to practice pharmacy and determine their eligibility to public confidence, and to this end the Faculty of the State School, a Faculty accustomed to conducting examinations, should do the work and submit the results to the State board. The diploma of the State School should be accepted by the State board as satisfactory evidence of knowledge, while all other applicants should be compelled to pass an examination by the same Faculty; and no man who has the least real interest in the progress of pharmacy or in State advancement will for a moment object to the matter being entirely under the control of the State Institution of learning.

Under these suggested conditions the standard could be raised in conformity with the intention, desire and hope of those who earnestly sought the passage of the pharmacy law. As it now stands, students in the midst of their school work appear before the board for examination and if successful, give up their class work entirely; hence, their success in these examinations is frequently the premium placed on ignorance.

In some states a modicum of pharmacal learning is not alone demanded but certain advancement in grade school work insisted upon as a prerequisite to matriculation and steps are being taken at the present time to make the requirements uniform through the

states. Some, however, contend that this is an "abridgment of one's rights," but if a state can lawfully demand it, I think it ought to be in a position to supply any deficiency which may exist, and this can most properly be done in the public school, preparatory school or state university.

If public education is worthy of support, if the university is the crown of the public school system, if free education is the people's inheritance, if the nation is but the reflection of the individual, then miserably small and unpatriotic is the one who will stand in the way of others who are endeavoring to protect the people from a horde of incompetents and who are trying to raise the educational standard.

In conclusion, believing that the very fact that we submit to an annual assessment for the purpose of raising funds for our own surveillance and punishment is belittling and derogatory to professional dignity and a condition not tolerated by the medical profession, I would most earnestly urge the members of the State association, through the association, to demand free reregistration, and I would call upon every pharmacist and assistant in the State to write to the senator and representatives from his district insisting upon the repeal of that part of the pharmacal law relating to the reregistration fee and demanding free reregistration as physicians enjoy. The future progress of pharmacy depends upon our bettering ourselves.

EVOLUTION OF SURGERY

JOHN B. MURPHY, A.M., M.D.

To the Committee of Arrangements I wish to express my sincere appreciation of the honor and privilege of appearing before you in the installation exercises of President Edmund J. James. An analysis of surgical events from the earliest dawn of history is interesting as an evolutionary study. It will be seen that all peoples, even though widely separated, progressed on the same intellectual lines. It will also be noted that after a great advancement or stride forward, there was a stay of progress for a long period of time. When we behold the Temple of Medicine—grand, as we call it—we can see in the analysis of its structure, that it is a mosaic of extremely minute particles, and still a great part of an incomplete whole. We are expected then to contribute only small frames to this mosaic. That the medical department of this University under its new and masterful leadership will continue to contribute its units of advancement is an assured fact, both from the history of its own inherent intellectual strength, and from the past achievements of the President who is to control its destinies.

A picture of the history of the evolution of medicine and surgery necessarily implies a picture of the development and evolution of the

world. The progress of science, and especially that of medicine has been closely connected with social events throughout the centuries. Religion, social prosperity or poverty, various phases of civilization, wars and many other features are in close touch with the intellectual trend of the times, and have left their marks on the various stages in the evolution of medicine and surgery. It is difficult even to give a correct and complete skeleton of the evolution of surgery in the limited time allowed. The journey is long; it covers a period of five thousand years. The historian encounters great obstacles; he has to span valleys of historic and even traditional omissions, and when history becomes more positive, medical facts are difficult of acquirement. The beginning of surgery dates back to mythological times. The first surgical attempts were probably aid in labor and arrest of hemorrhage. The instinct of individual preservation compelled the first man to use primitive weapons against wild animals and also means of protection against climatic inclemencies. This is the origin of empirical hygiene. Skulls of prehistoric periods show evidence of trephining. Absence of documents of prehistoric and mythological times makes it impossible for the eye of the historian to penetrate the darkness of those ages. I shall therefore commence with the Egyptians, whose history is best known of all ancient nations. The subdivisions of general history may be utilized for that of the history of medicine and surgery, as follows:

1. Ancient, ending with the fall of the Western Roman Empire, A. D. 476.
2. Mediæval (Dark Ages) from the sixth to the end of the fifteenth century.
3. Modern, commencing with the Renaissance.

I shall divide this latter period into (1) Period of Cellular Pathology; (2) Pre-Pasteurian; (3) Post-Pasteurian. Virchow represents that of cellular pathology and Pasteur the border line between the older and modern surgery.

First among the ancients we will consider the Egyptians. The history of this wonderful nation is open: thanks to modern scientists we are able to understand the mysteries of hieroglyphics. Egyptian temples, monuments, obelisks, pyramids and like remains tell us that medicine and surgery have been practiced in Egypt. Larrey has seen on the walls of Egyptian temples drawings of instruments similar to ours and representations of amputated members. Some of the characters of the hieroglyphic writings are surgical instruments. Egyptians exposed their sick in public places so that some who had suffered from a similar disease might tell the sick what remedy they had used. Former sufferers were also required to inscribe on the walls of temples both symptoms and treatment. The collection of these symptoms was classified by priests and formed the Egyptian medical

code, the "secret book," the origin of empirical medicine. Information obtained from Egyptian monuments is greatly augmented by that given in the Papyrus Ebers, the most important of all medical writings of antiquity. The papyrus was written 3000 B. C. in the time of King Re-Seo-Ka (Amenophis I). It was found in Memphis and is at present in Berlin. The Egyptian conception of disease was that the latter was due to the anger of some deity, especially that of Isis, there being always a struggle between good and bad, right and wrong, and the triumph of the latter resulted in disease. Medicine was professed by priests and the laity. At all times the influence of religion was the characteristic note of Egyptian medicine. The Egyptians were first physicians and then surgeons. The former were very familiar with the various medications. The diseases best understood were those of the eye, in which they used both medical and surgical treatment. The Egyptians were affected with dreadful ophthalmias; even today ophthalmic diseases predominate. Several mummies were found with artificial teeth, which shows that dentistry was practiced in those times. The mummies also show the most wonderful bandaging, and no one today could excel them in this particular art. Egyptian embalming was perfect. It was a general practice, yet the people at large had a prejudice against embalmers, and not infrequently were they exposed to stoning. That they had any anatomical knowledge is doubtful. The apogee of Egyptian medicine was reached in the Alexandrian period. Among the four hundred thousand volumes of the Alexandrian library many works were probably medical. The Alexandrian Museum, founded by Ptolemy Philadelphus had four departments; literature, mathematics, astronomy and medicine. An Egyptian doctor treated only one or two diseases, which shows that the greatest specialization prevailed in those times. The Greek historian, Herodotus, surprised by the great number of physicians in Egypt, states that he gained the impression that nearly all of the Egyptians were physicians, and that one who was afflicted with several symptoms had to consult several physicians. Egyptian medicine sank into obscurity in the time of the Ptolemies and gave place to Hellenic medicine.

Among the Hebrews until 1000 B. C. (Kingdom of Solomon) surgery was greatly neglected. Mosaic writings contained mostly dietetic prescriptions. They also recommend cleanliness, which is the essence of Mosaic religion, and hygiene. They knew something of embalming, which in all probability was learned from the Egyptians. On the death of Jacob, Joseph ordered his servants to embalm the body of his father. The chief surgical attempt was circumcision, which was performed with *Æthiopian* stones. Moses taught the people how to protect themselves from leprosy and other skin eruptions, one of them being similar in description to syphilis. The

originality of Mosaic medicine was practically gone when they came in contact with the Syrians and Persians. The influence of the latter is reflected in the Talmud. In later times the Mosaic intermingled with the Arabic.

Little or nothing is known of Chinese medicine. The Chinese were exclusionists from the most ancient times, and a foreigner could not penetrate their social life.

The Hindus had a knowledge of both medicine and surgery. An English writer shows that surgical instruments were used in India before the advent of Alexander. They were more numerous than those used today in England. He also states that one hundred years before the Christian era the Hindus performed just as good operations as those performed today in Great Britain. At that epoch Susruta showed that surgery was the first and highest of the healing arts and the least liable to fallacy, that it was pure in itself, unapproachable in its applicability, a worthy product of heaven, and a sure source of fame on earth. Hindu medicine is included in the writing Vagadastir. Their conception of disease, as that of all Asiatic people, is the continual struggle between good and bad, right and wrong, the defeat of the former resulting in the disease. Some of their medical philosophers conceived the idea that disease is the result of a conflict between the gases which circulate in the vessels of the body. Hindu surgery may be divided into Pre-Brahmanic or the Pre-Buddhistic period, which is influenced principally by superstition, and Post-Brahmanic, which is the epoch of philosophy. Surgery flourished in the latter period. The "Charaka Club" of New York has for its object the study of Hindu surgery. In their wars military surgeons accompanied the armies to the battle field. The greatest skill in ancient surgery was displayed in the operation of rhinoplasty. It is also said that the Hindus later performed laparotomies. The Hindus possessed a marvelous ointment which made the scars of variola disappear. They also treated successfully bites of venomous serpents.

According to some historians in the Homeric period there is no evidence of the practice of medicine or surgery among the Greeks. Others, however, state that in that period the Greeks had surgeons ready to treat emergencies and to control hemorrhage by styptic powders. Esculapius, the founder of Greek medicine, accompanied Castor and Pollux as surgeon during the Argonautic expedition. He was greatly honored in his time, and after his death temples were erected in his honor and sacrifices made. Pluto, god of hell, entered a protest to Jupiter during the practice of Esculapius, stating that his daily host of dead was considerably diminished. This illustrates the wonderful power Esculapius had to diminish diseases. After his death the practice of medicine was exclusively in the hands of priests and some teaching was done in temples. In the period before Hip-

pocrates, disease was considered the result of the anger of some offended god, especially in the case of plagues and epidemics. From the Illiad and the Odyssey we learn that Apollo was responsible for the death of men and Diana for that of women. These principles were inimical to the enforcement of sanitary laws. The Greeks' desire for physical perfection was of greater value than the knowledge of medicine or surgery. They knew the art of beautifying their persons. Greek legislators made laws to promote health. It is known to all of us that the Greek legislator Lycurgus ordered that all feeble and crippled children should be killed by throwing them into a valley. This was sometimes done by the children's parents. The most important personage of medicine in Greece, in fact of all ancient nations, was Hippocrates. He was born on the island of Kos between 446 and 450 B. C. and died 370 B. C. in Larissa (Thessaly). He lived in the glorious age of Pericles, and was contemporary to Socrates. Many of his ancestors devoted their lives to medicine. He traced his ancestors to Esculapius and Hercules. The conception of disease that prevailed during the Pre-Hippocratic period was destroyed by the Hippocratic conception. Hippocrates was the founder of humoral pathology which included four humors—blood, mucous, black and yellow bile. Any change in these four humors was the cause of disease. The fundamental principle of his therapeutics was to help and not to damage. Until Hippocrates there were no clinicians. Most of the doctors were therapeutists. Hippocrates was the greatest clinician of all times. From him we have today Hippocratic fingers in chronic chest diseases and the Hippocratic face. No clinician has ever excelled his description of the face of the dying. The school of Hippocrates found a rival in the school of Cnidos (Knidos). While the latter was treating symptoms, and principally by drastic measures, Hippocrates endeavored to modify the humors, and in this way induce a cure. In the time of Constantine, the school of Cnidos, together with many pagan institutions, disappeared. The followers of Hippocrates were dogmatists. They endeavored to establish the basis of a theoretical system of medicine. The greatest hindrance to the serious advancement of surgery was due to ignorance of anatomy, which is explained by the respect of the Greeks for their dead.

It is proper to speak of the medicine of Rome and not of the Romans, because the entire Roman knowledge was centralized in Rome. In the times preceding the Republic medicine and especially surgery were entirely neglected. The traces of systematic medicine appear at the end of the Republic. There were men employed by the city who had the responsibility of the city's hygiene. Circuses and theaters employed medical inspectors. Cato in his writings teaches the people how to care for themselves and their animals in disease. At that time the Romans had great respect for the physician (*vulner-*

arius) while the surgeon (carnifex) was despised. There was no originality in Roman medicine or surgery. The Greeks taught the Romans in all branches of knowledge, especially of medicine. Among the most brilliant doctors in Rome was Asklepias of Bithynia (124 B. C.). Based on the atomic theories of Epicure he conceived disease as the result of the mutations of the atomic or solid elements of the body. His solid pathology is opposed to the humoral theory of Hippocrates. His followers, the Methodics, explained the origin of disease by the properties of the tissues to expand and contract, which was practically a variation of the atomic theory. The Methodics also conceived the sympathies between organs. In the reign of the first Roman emperors there was an influx of Greek doctors from Asia Minor who laid the foundations of its various schools. Athenaeus was the founder of the Pneumatic school, *pneuma* (air) being the cause of diseases. The misunderstandings between the Pneumatic and Methodic schools gave birth to a new school, the Eclectic.

Galen, who lived one hundred and thirty years after Christ, was one of the greatest ancient anatomists. He was a man of principles and a true scientist. He studied anatomy and physiology. He dissected many animals, especially monkeys. He applied the anatomy of the latter to man. In other words, he was the pioneer of comparative anatomy. He was familiar with the anatomy of the heart and the distribution of arteries. He knew that the left heart contained blood. The presumption is that he was familiar with the circulation. Medicine after Galen ceases to be original and the influence of physicians from Pergamus was strongly felt. The practice of medicine was not controlled by laws in Rome. To a great extent medicine was practiced by slaves, either natives of Rome or imported from Asia Minor. They served as physicians and surgeons to their masters and accompanied them in their travels and wars. Specialization was also characteristic of Rome. There were oculists, aurists, gynecologists, etc. Military surgery was first organized in the time of Roman emperors of the Western Empire and reached the apogee under the emperors of the Eastern Empire. An appreciation of Roman surgery can be obtained by a visit to the halls of the Museum of Naples. Many and perfect instruments recovered from the ruins of Pompeii are exhibited there, and instruments are our best historical guides to the degree of the civilization of the respective period.

Like the Romans, the Arabians were not original. However, they deserve the credit of having studied Egyptian and Greek medicine, which they transmitted to several European nations. The accusation that the Arabians destroyed the Alexandrian library for the purpose of heating their baths is very unjust. On the contrary, from several sources we learn that many works from the Alexandrian library were rescued or saved from destruction by the Arabians. There were

great mathematicians, philosophers and doctors among them. Medicine, however, was always superior to surgery, which can easily be explained by the Oriental conception of fatalism. In the Middle Ages the Arabians of Bagdad and Cordova professed and transmitted knowledge of medicine throughout southern Europe.

The history of surgery in the Middle Ages is very obscure. We should not regret the absence of definite information concerning those times, because it is not worthy of record. However, for a clear understanding of whatever is known, we must divide the first three centuries into Oriental and Occidental. The Oriental world was familiar with the Greek language and consequently had access to the master works of Greek medical writings. The Occidental world was ignorant of the great antiquity. Medicine in the Occident was practiced by monks, priests or uneducated barbers. The barber shop was the school, laboratory and library of the mediæval doctor. In the first half of the Middle Ages monks were uneducated, and superstition and ignorance were the characteristics of the medicine they professed. Superstition and supernatural belief was always a hindrance to the progress of medicine; however, many Christian institutions cared for the sick in asylums and hospitals. No matter how ignorant and superstitious the monks and priests were in those times, they were by far superior to barbers and bathers. The former practiced medicine only, since they were prohibited from using the knife and drawing blood from patients. The practice of medicine among monks and priests was restricted by an edict issued by Pope Calistus II, who forbade priests and monks to practice medicine. Several other popes were compelled to issue edicts in which it was stated that the duties of a clergyman must be purely ecclesiastic. The only place where systematic knowledge could be obtained during the first half of the Middle Ages, was the school of Salerno. The school was founded in the Italian town, Salerno, between the seventh and eighth century. They had distinguished physicians among their teachers, and many travelers availed themselves of the opportunities offered by the school. The teachings of the school of Salerno are included in the "Compendium Salernitanum." Their knowledge of surgery, especially military surgery, was strengthened during the last Crusades.

The fame of the school reached its climax between the twelfth and thirteenth centuries. With the creation of new universities in Italy the fame of the school greatly diminished and it soon disappeared. Frederick II compelled his Neapolitan subjects to study medicine in another university than Naples. The school of Montpellier, founded in the twelfth century, succeeded in fame the school of Salerno. Despite all of these efforts, the ten centuries of the Middle Ages have not advanced ancient knowledge of medicine, and stand like a sad valley between two solid rocks, the ancient and modern world. Frederick

the Great, when reflecting upon the Middle Ages expressed himself as follows: "From Constantine the Great, 327 B. C., until the Reformation, the whole world must have been insane."

Until the thirteenth century most of the writers of medicine were Italians and their writings passed the Pyrenees and spread throughout France. French writers soon excelled Italian writers. In northern Europe, and especially in the countries of the Germanic tongue, the situation was deplorable. The few universities in existence refused to incorporate medicine among their branches.

The greatest achievement in intellectual evolution of all the centuries is the invention of printing, which is the most wonderful gift ever offered to humanity. Faust, Schaeffer and Gutenberg deserve the honor of the invention. Printing prepared the Renaissance, which is the revival of learning. The Renaissance resurrected Hellenic classicism; it has destroyed the ignorance that prevailed and demolished the heavy walls within which were imprisoned science and thought. The conquest of Constantinople by the Turks in 1453 drove out from the Orient to Italy many Christians who brought with them Greek writings.

The Reformation at the beginning of the sixteenth century raised the intellectual standard of religious institutions, which indirectly helped the progress of science. The many wars of the sixteenth century necessitated surgical aid; surgeons regularly accompanied the armies to the battle field. One of the most illustrious military surgeons was Ambroise Paré. He was originally a barber, but his natural vocation was so great that he soon became famous as a surgeon. Up to the time of Ambroise Paré the wounds of soldiers were filled with boiling oil (200°), and he for a time applied this remedy. In one campaign he failed to obtain the necessary oil for the treatment of wounds and was greatly embarrassed by this misfortune; he was very restless and could not sleep for two nights. To his great surprise he found the wounds of soldiers on the third day in a better condition than when oil was used. The great inflammation caused by the hot oil was not present. This event enlightened and induced Paré to change his conception and treatment of wounds. In the battle of Piedmont, 1536, he refused to make use of the hot iron for the arrest of hemorrhage, preferring the ligature for the bleeding vessels.

The sixteenth century developed great interest in anatomy. The name of Andreas Vesalius (1516) is closely connected with the progress of anatomy in this century. He showed that the anatomy of the monkey cannot identically be applied to that of man, and that in this regard Galenus was wrong. Eustachius, Fallopius Fabricius and Aquapendente were distinguished anatomists of this period. The last named built an anatomical amphitheater at his own expense, where he taught anatomy to the students, and made a careful study

of the valves of the heart. After fifteen years of research he published his work on circulation, but like many of the great discoverers, he was ridiculed and considered demented by many. Before he died, however, he had the satisfaction of seeing his theory universally accepted.

Of great moment in the seventeenth century was the discovery of circulation of the blood by William Harvey (1628); which enabled Marcello Malpighi to elucidate capillary circulation. Harvey also deserves credit for the establishment of the basis of embryology by his dictum: "Omne vivum ex ovo." In this century the lacteals and thoracic duct were carefully described, so that the lymphatic circulation was well known about the same time with blood circulation.

Microscopic and pathologic anatomy were considered in this century, and the names of Malpighi, Löwenhoeck, Morgagni are closely connected with these sciences. In this century amphitheaters, hospitals and schools were systematically established. In 1660 the corporation of the St. Côme was established, and medical consultations, lectures and dissections were given in a little house, which two years later had the sign "Amphitheater for Rent." Physics and chemistry were considered in this century as a new basis for therapeutic purposes. "Iatrophysics and chemiatrices" originated in this century. The Hippocratic clinical observation was revived, and for the first time monographs were published on special diseases. In the eighteenth century the practice of medicine was in hands of the barbers almost exclusively; their moral and intellectual standing was greatly raised by the systematic teachings of medicine in universities, and also by the foundation of institutions for the teaching of military surgery. Of great importance to the progress of surgery was the foundation of the Academy of Surgery by Maréchal in Paris, 1731. Its influence was felt not only in France but throughout Europe. Seven years after the foundation of the Academy of Surgery, it incorporated the "Ecole Pratique de Chirurgie," with Chopart as its first teacher. In 1780 Joseph's Academy in Austria was established, and in 1795 Frederick Wilhelm's Institute was founded in Berlin. Soon afterward all of the European countries added to their universities departments of medicine (University of Breslau, 1702; Bonn, 1771; Göttingen, 1751). John Hunter, the great anatomic and surgeon, founder of the famous Hunterian Museum, is considered the father of experimental pathology in England. The empirico-materialistic philosophy of the eighteenth century developed the natural and allied sciences which considerably helped the practice of surgery. In the second half of the eighteenth century several schools disputed their superiority, as for instance, the nervosistic and vitalistic schools. Mesmer was the exponent of animal magnetism or "mesmerism." There is, according to his school, a close relationship between planets

and disease. It advocated treatment by magnets. The Indian Vedas informs us that the Hindus rubbed into the arms of their children the pus obtained from smallpox vesicles, secured a year before; the area so treated was covered with cotton saturated with sacred water from the Ganges. In the tenth century B. C. it was customary in China to introduce cotton saturated with pus of variola into the nostrils of children. John Brown was the originator of the theory that disease is due to alterations in the intensity of irritations. Another important event is the discovery of vaccination by Jenner in 1796; this was the prime recognition of immunity and arrived at in an empirical way. He did not realize the colossal significance of his discovery, as it is the basis of the highest ideal of therapeutics and preventive medicine in the enlightenment of the first decade of the twentieth century. Notwithstanding our boasted intellectual development in the last century, it required one hundred years for this truth to become grounded and bear its legitimate fruit. Toward the end of the eighteenth century the progress of medical institutions in France was arrested and many of their neighbors were somewhat confused by the French Revolution. In Paris it destroyed several institutions, and the Academy of Surgery ceased to distribute its annual prizes in 1793.

At the beginning of the nineteenth century great progress was made in all branches of human activity. While the eighteenth century is the century of literature the nineteenth is that of the positive sciences. Physicians and surgeons now realize that medicine and surgery must form an inseparable body, an indivisible unity, and that all allied sciences should converge toward the advancement of medicine. Electricity, chemistry and applied mechanics greatly stimulated the progress and industry in therapeutics. Bacteriology and pathological anatomy, which are the foundations of surgery, show splendid development in the second half of the nineteenth century; this period must be considered the beginning of modern surgery. The three fundamental bases of modern surgery are anesthesia, hemostasis, antisepsis and asepsis.

The history of anesthesia goes back many centuries. Herodotus tells us that Scythians inhaled vapors of hemp seed to produce drunkenness 200 B. C. Hoa-Tho, a Chinese surgeon, amputated a leg by using haschisch. In the thirteenth century several surgeons used during an operation sponges saturated with the juice of madragora. An English chemist, Humphrey Davey, accidentally discovered the soporific properties of the protoxide of nitrogen; in 1834 Horace Wells, an American dentist, tried it on himself and Morton and Jackson tried it on others. Wells recommended the use of ether instead of protoxide of nitrogen. It is said, however, that the American dentist Morton is the original discoverer of the anesthetic properties

of ether. Later, Simpson of Edinburgh used chloroform as an anesthetic. A committee of the Chicago Medical Society after a careful search and investigation established beyond a doubt that the priority of the use of chloroform belongs to Guthrie. It is my hope as well as my belief that chemistry will give us an anesthetic in the future which will not be toxic and will never expose the patient to death from its intrinsic effects.

Hemostasis was unknown to ancient and mediæval surgeons; patients affected with severe hemorrhage died, and still it seems the most primitive impulse would be to stay the flow of blood by pressure. Until the end of the eighteenth century sixty per cent. of the amputations were practiced without hemostasis. The ligature was not known until the time of Paré, and only in the nineteenth century did it commence to be generally employed. In 1733 John Louis Petit invented the tourniquet.

Antisepsis and asepsis are of still later origin. Until the discovery of Pasteur every wound suppurred and was complicated with erysipelas, gangrene, tetanus, and the like. Abdominal operations were generally fatal. A good picture of the epoch before Pasteur and antisepsis is given by Harold Begbie, (*Pall Mall Magazine*, 1904, vol. 33): "Thirty years ago a screaming patient was strapped and pinioned to the operating table. The knives flashed at lightning speed, the surgeon, sweating with his hurried carpentry, dropping beads of perspiration and other foreign bodies into the wound, cut through the bone with a saw, whose only virtue was its sharpness, while the assistant selected his ligature from a row held in his teeth, in order of size from right to left."

Systematic and scientific antisepsis originated with Pasteur and Lister. However, the ancient nations knew of certain substances, marvelous balsams, which had the properties of healing wounds. Hot iron and boiled oil were used as antiseptics in the Middle Ages.

In ancient Rome malaria claimed many victims. Romans conceived the idea that some strange elements must enter the body and thus cause the disease. It was customary for people affected with malaria to gather in public places and make a prayer asking to be delivered from these strange elements. In 1838 Ehrenberg considered the infusoria as animals. In 1840, Vogel described the oedium albicans. In 1850 Davaine after listening to some of Pasteur's lectures, considered the rods (bacilli) he saw in the blood of cattle, which died by the hundreds in various herds, as being responsible for the terrible disease. According to Pasteur's principle he thought that these rods fermented in the blood of cattle and finally caused death. It was left to Pasteur to make the discovery that had the greatest influence in medicine and surgery of all times. Pasteur after years of research announced that fermentation and decomposition of fluids

do not take place without the presence of some microscopic living organisms—bacteria. His theory is today an established fact and it destroyed the school of spontaneous generation. Pasteur proved that boiling is unable to destroy some resistant bacteria or their spores, and if their death be effected, fermentation is impossible. A strong opponent to Pasteur's theory was the great chemist Liebig. He considered fermentation a simple chemical process, it being accomplished in one of three ways, oxidation, hydration and halfting. We all know today that addition of oxygen, water or splitting of a molecule, without the presence of bacteria, makes fermentation impossible. Pasteur was not a doctor of medicine, yet his discovery is the greatest fundamental principle of modern surgery. He rightly deserves the title of "Father of modern surgery." Had Pasteur not announced the principle of bacterial fermentation, the aspect of surgery would today have been the same as two thousand years ago. Lord Lister, based on Pasteur's principles, conceived the idea of treatment of infected wounds by carbolic acid. His name is inseparable from that of antisepsis. His personal clinical observation completed the advantages drawn from Pasteur's discovery. He noted that compound fractures, that is fractures exposed to air, were septic, while simple fractures, or those not exposed to air, never suppurated. Lister, at first was suspected of dishonesty, but scientific truth penetrates every resistance and soon all European countries were convinced of the truth of his principle and grasped the magnitude of its bearing in the elongation of life and amelioration of pain. Later Von Bruns and Mickulicz gave Lister's principle great consideration; by their researches they were able to demonstrate that the danger of infection from the air was not so great as Lister thought, and that the use of carbolic acid was not absolutely indispensable. They proved that bacterial poisons were also tissue poisons, and that carbolic acid modified the protoplasm of the cells and even destroyed them. Therefore, they thought it would be better policy to prevent any possibility of infectious organisms touching the wound by great cleanliness, and from this principle originated asepsis, which is the basis of our modern surgery.

The nineteenth century, or better, its second half, has excelled in discoveries. One can truthfully state that the latter half of the nineteenth century accomplished more than the previous four thousand years. The progress of biology and pathology, of anatomy and bacteriology, the appliance of chemistry to bacteriologic and pathologic technique, the adaptation of electricity and applied mechanics to surgical instruments and appliances made the surgery of the past few years realize a culminant progress. Mechanical skill and surgical technique have attained great perfection.

The records of the history of medicine in America are obscure, scattered and not positive. The most successful attempt of reconstructing

facts in their chronologic order, based upon reliable documents is that of Packard in his "History of Medicine in the United States."

One of the first physicians was Dr. Wootenn, who came to Virginia in 1607, as surgeon-general of the London Company; he later returned to England. One of the first surgeons of New England was Dr. Pratt, about 1640. In 1629 the governor and Company of Massachusetts Bay in New England, engaged Lambert Wilson to act as "chirurgeon" to the settlers of Salem. America did not escape from the calamity of the practice of medicine by barbers, which was so widely spread in the Middle Ages in Europe. This can be seen from a letter of Alricks (1658), the director of the colony of New Amstel, in which he states with great grief "our barber surgeon died, and another well acquainted with the profession is very sick."

Among the passengers on the Mayflower was Samuel Fuller, one of the earliest practitioners in Massachusetts. He was a deacon in the church of Leyden and was not entitled to practice medicine, as he held no diploma. This association of medical and religious practice was not uncommon in the first half of the seventeenth century. We find a similar example in Dr. John Fiske who in 1637 settled at Salem as a clergyman, and combined the practice of medicine with that of religion. In 1646 Winthrop of Boston stated in one of his letters that lues venerea has fallen upon many of the population of Boston. For the relief of this and other diseases fasts have been held and in 1690 the general court of Massachusetts ordered a public fast for the relief of small-pox.

Although in the seventeenth century medico-legal questions were entirely unknown to the public and legal authorities of various communities, we find that in 1690 Dr. Kerfeyle performed an autopsy on Governor Slaughter. He had died suddenly and there was great suspicion of poisoning. In the second half of the sixteenth and the first half of the seventeenth century the female midwife played a very active and important role in the communities of early settlers. The practice of midwifery by males was very unusual. The first physician to practice this as a specialty was Dr. James Lloyd of Boston in 1754.

The absence of sanitary laws on the vessels carrying immigrants for America resulted in the death of a great many either during the voyage or shortly after landing. To illustrate we will mention only one of the very numerous examples. In 1618 Francis Blackwell shipped one hundred and eighty colonists intended for Virginia; of these one hundred and thirty died on the voyage. There was a constant importation of diseases from Europe; in 1677 many perished in New England from small-pox. The disease decimated many Indian villages. Considerably worried by these ravages physicians and private citizens searched for a remedy. The first attempt at prophylactic inoculation of small-pox was made in Boston; Reverend

Walter and his nephew were inoculated by Dr. Mather, but he bitterly denounced the procedure and threw the two boys out of his house. Later they calmly accepted inoculation. One of the most ardent partisans was Benjamin Franklin. In Massachusetts free vaccination was done for all who desired to submit themselves.

The first account of the occurrence of yellow fever in New England was in 1647.

Americans were slow in founding institutions for medical education. Medical knowledge was obtained either from hospitals or physicians of some reputation. A certificate of apprenticeship was sufficient to practice medicine in those days. Those who wanted to learn "physic" went to Europe, principally to London and Edinburgh. We see for example that between the years 1758 and 1788, sixty-three Americans graduated from the University of Edinburgh.

These European graduates imported to America not only a substantial knowledge of medicine but also a knowledge of many of its allied sciences and were classical scholars. Some of these physicians possessed encyclopedic information.

The first to receive a diploma in the United States was Daniel Turner, who in 1720 obtained the honorary degree of medicine from Yale College, as an expression of its appreciation of a gift to the institution. After a systematic course in medicine, the first diploma was given to Dr. Archer of Philadelphia. One of the first systematic teachers of medicine was Dr. Charles F. Wiesenthal, who settled in Baltimore in 1755.

The only medical work published in the seventeenth century was "A Brief Rule to Guide the Common People of New England how to Treat Themselves and Others in the Small Pocks or Measels," by Thomas Thatcher.

The Pennsylvania hospital was an important medical center about the middle of the eighteenth century. In 1783 Dr. John Foulke was permitted to use one of the rooms of the hospital for an "elaboratory;" in this room he delivered for thirteen years lectures on "chirurgical and physical subjects," charging twelve dollars for a course.

The College of Philadelphia was founded in 1749, but it had no medical department for ten years. The latter was established by Dr. John Morgan, who was a pupil in medicine of Dr. Redman of Philadelphia. In 1768 the degree of M. B. was given to seventeen graduates.

In 1637 a college was erected in Cambridge; a year later Rev. John Harvard donated to the college his library and half of his fortune. It was subsequently known as Harvard College, now Harvard University. The medical department of Harvard was not organized until 1783. In 1798 a medical department was established in Dartmouth College, Dr. N. Smith being one of its founders.

The teaching of medicine at this time was very primitive. One of the fundamental branches of medicine, anatomy, was taught very imperfectly, as bodies could not be obtained for dissection; the law strictly prohibited dissection and vivisection. Occasionally a dissection was made on the body of a condemned criminal.

Great opportunity was offered for the study of military medicine and surgery during the Colonial and Revolutionary wars. Those desiring to enlist in the Revolutionary army had to pass a careful medical examination. Military hospitals were established at various points under the charge of military surgeons. In the Colonial period the physician occupied one of the highest positions in the community; this is shown by the fact that several of the signers of the Declaration of Independence were physicians.

One of the earliest hospitals in this country was the Pennsylvania hospital, which was founded about 1732. For several years preceding this date it was simply an almshouse, so that properly speaking it was not a hospital. Some, however, trace the foundation of the hospital back to 1709; its first clerk was Benjamin Franklin. It has the oldest medical library in this country. The second oldest in this country is the New York hospital. Its charter was granted in July, 1771, as the "Society of the Hospital of the City of New York in America." The foundation was laid in 1773, but before its completion it was destroyed by fire in 1775. The building was rapidly reconstructed, and in 1776 received patients. The last of the eighteenth and beginning of the nineteenth centuries witnessed the establishment of several dispensaries in Philadelphia and New York.

After the example of European physicians the Americans endeavored to assemble and discuss medical topics. The first attempt at a medical society was made in Boston between the years 1735 and 1741. The oldest organized, however, is the "New Jersey Medical Society." One of the first medical journals in the country was "A Journal of the Practice of Medicine, Surgery and Pharmacy in the Military Hospitals of France," including translations from French journals. The first and purely American medical journal was the "Medical Repository" (1797 to 1824).

In the sixteenth and a part of the seventeenth century there were no laws regulating the practice of medicine. In 1736 an act was passed in Virginia regulating the fees and accounts of physicians. In 1760 an act was passed in New York that only those should be entitled to practice medicine and surgery who passed an examination before a board composed of "One of his Majesty's Council, a Judge of the Supreme Court, the Attorney General and the Mayor." Another similar law was passed in New Jersey in 1772.

At the beginning of the nineteenth century American medicine was practically British, as most of the American students came from

Great Britain, and American medical literature at this period was under strong British influence.

While the Americans were greatly absorbed by the struggle for independence, and naturally neglected the practice of medicine and surgery, we find here and there eminent surgeons. One of the most conspicuous places in the gallery of American surgeons is occupied by Ephraim McDowell, a native of Virginia and a resident of Danville, Kentucky, who in 1809 made the first ovariotomy ever performed and that without an anesthetic. His patient lived thirty-two years. Under those unfortunate conditions for the practice of surgery he saved the lives of eleven women out of thirteen operated. Ministers and colleagues condemned McDowell for this practice. They were supported by the local press. When McDowell presented his manuscript on the practice of ovariotomy its publication was refused because it was a "barbarous procedure," and as such should be abandoned. Ovariotomy was greatly ridiculed at first in England. The blighting influence and caustic criticism of the "experienced" did not abash the germ of truth in McDowell's achievements, though many an intellectual ovum has been destroyed by its acetic force. The second surgeon to perform this operation in the United States was Nathan Smith. The mortality of ovariotomy at the beginning of the eighteenth century was about sixty-six per cent.; about 1850 the average mortality in Europe was from sixty to seventy per cent. At the present time we know that the mortality does not exceed one per cent.

One of the most important events at the beginning of the nineteenth century in America is the discovery of anesthetics. According to Packard the credit for first using ether for anesthetic purpose goes to Crawford W. Long; its application to practice is due of W. T. G. Morton, who used it surgically after the suggestion of Jackson, who did not take as much interest as Morton did. Horace Wells, after listening to a lecture on the chemistry of nitrous oxide used it the next day on himself. One of his teeth was extracted by one of his colleagues. Recovering from the anesthetic, Wells exclaimed, "A new era in tooth pulling." There was in those times a great contention for priority, which caused so much ill feeling that some of the participants became insane.

The number of famous surgeons increased constantly in the nineteenth century. One of these was Rhea Barton of Philadelphia; he had several original procedures for operating on the bone and joint. Various records show that he was the first surgeon to suture the patella.

Physick sutured two fragments of a fractured humerus. Valentine Mott, (1786 to 1865), was the first to ligate the innominate artery, and the patient survived for a long time. He was famous in his time

for his arterial surgery. In 1856, Cornochan excised the second branch of the trigeminus for tic douloureux.

Nephrectomy is an American operation and was first performed by Wolcott of Milwaukee for a malignant disease. British surgeons ignored Dr. Wolcott and considered Simon of Heidelberg the first to practice nephrectomy. The extirpation of the kidney for gunshot wounds was first made by W. W. Keen of Philadelphia.

A great part of the credit for abdominal operations goes to Americans. The first laparotomy for intussusception was practiced on a negro in 1831 by Dr. Wilton. This was followed by a complete recovery. In 1847 Gross advised the patient to have extirpation of a segment of the intestine and repair by end-to-end suture. The patient refused the operation. An operation of the same character was later performed by Kinloch of South Carolina.

Pathologic anatomy and surgical pathology originated in this country with Samuel B. Gross, 1805 to 1884. He is also the originator of experimental surgery later promoted by Charles T. Parks.

Advancements in surgery in this country became so numerous and from so many sources that even a chronological enumeration of the events and men would carry me beyond limitations. The American Medical Association, the largest medical organization in the world, was founded by Dr. Nathan Smith Davis in 1849. He was a citizen of Illinois and for many years he was the guiding genius of this association. Illinois has the largest state medical society in the Union. Its metropolis, Chicago, has the largest local county society in the world. Chicago has a greater number of medical and dental students than any other city on the globe. Illinois is geographically and scientifically so situated that it is destined to become the "hub" of medical education in the western hemisphere. The force and duration of its influence in that position must in a large degree devolve on the medical department of this University, on you gentlemen of its Faculty, on you alumni, on you students of the University of Illinois, each performing his task to the fullest power under the leadership of the intellectual giant who today is installed as your President.

From these contemporary national advancements of medicine, the conviction is irresistible that it is an evolution according to the well defined laws of intellectual development, and not an arbitrary, haphazard or chance result.

After the consideration of this array of historic events, both in Europe and America, we naturally turn to the doctor himself aside from his art and his science and ask, why have doctors been the honored men of all ages, conspicuous for advancement? Because of their love of truth and their fearlessness in its defense. Why have they exerted such an influence in the progress of science, of ethics and of society? Because they have been the learned and educated people of

all times. They pursued science for the love of knowledge, and for its practical application to the diminution of human suffering. By their exemplary lives, by their loyalty to the code, which is the practical application of the Golden Rule, they have stimulated a respect for duty that matured to the science of ethics. As scholarly and scientific men, as models of morality and integrity, they have exerted a great influence in molding society to their high ideals. Why have they been in close touch with all grades and classes of people? Because of their ubiquitous admiration of knowledge, which is power; because of their innate respect for the exemplars of morality and integrity; because of their avowed devotion to duty regardless of its personal or physical hazards or its pecuniary rewards; because of the dominance of the humanitarian principles in their life work, where the best of medical store is distributed as lavishly on the penniless as on the prince; because of their recognition as a profession living close to the highest ideals of the intellectuality of their time; and the ideals of an individual, of a profession or a community are the best meters of their intrinsic worth. No individual, profession or nation ever attained to any considerable height without lofty ideals. One cannot avoid a deep admiration for those of the medical profession, and a deeper respect for the fidelity with which its individuals and organized bodies have endeavored to attain them. The prevalence and stimulus of our ideals have been the measure of strength of our progress. Their neglect would signal our decadence; their abolition would be the death knell of our usefulness and influence in the world's evolution.

What are the impulses that have continually impelled the medical profession in its indefatigable and untiring efforts at advancement? They have been the most honorable and powerful which operate on man's destiny; love and sympathy for their fellow man, admiration of and desire for knowledge of the laws that govern the complex, diverse and multiform, mechanical and chemical construction and affinities of the human organism, so harmonious and constant in their workings as to form a poem of action and a symphony of chemical changes. The doctor's achievements have been the result of the operation of the inexorable law of advancement which controls intellectual progress in every phase of science. Medicine has not advanced independently nor far beyond the collateral sciences. It has appropriated to its service and to practical application the principles of mechanics, the elements of chemistry, the force of physics, the knowledge of biology, the science of bacteriology with its changes in, and products of micro-organisms as influenced by environment and physical and chemical laws. The medical profession has continually advanced by its honest and critical analysis of its theory and practice in the past, by its enthusiasm and thirst for the establishment of fundamental principles of truth in the present, and its tender and confiding solicitude for the

intellectual and moral training of its members for the future. Medicine has given birth to few iconoclasts; it has nurtured many devoted, honest and courageous critics. We can well say of the doctor with Adams, that he was made for all ages—for the past, by the sentiment of reverence for the achievements of his professional forefathers; that he was made for the present by his ideal humanitarian love and sympathy, and that he was made for all future time by the impulses of affection for his progeny. The record of professional history has not a discordant note to these sentiments. The working axiom of the medical profession should be, "study your forefathers, build for posterity."

Young aspirants to medical honors, your science, your art, your ethics, and your devotion to principles must command the admiration of contemporary scientists, and incite the enthusiasm, stimulate the endeavor and foster the perseverance of medical posterity. You must see that your heritage as a member of the medical profession is not only carried unsullied through your lives, but that it has been enriched by your labor, that it has been refined by the heat of your enthusiasm, and that you have added to it strength and courage—the force which comes from a love of truth, the practice of virtue, respect and solicitude for the rights of others. You must not permit the pride of attainment nor the blight of self-satisfaction to retard your efforts. You must not permit the sophistries of commercialism nor the delusions of immediate gain to warp the sterling principles of integrity. You must not be unmindful that you are a link in the great chain of medicine, and its strength depends on you.

Finally, what an honor it is to belong to a profession to which Robert Louis Stevenson has paid this great tribute:

"There are men and classes of men that stand above the common herd; the soldier, the sailor and shepherd not infrequently; the artist rarely; rarelier still, the clergyman; the physician almost as a rule. He is the flower—such as it is—of our civilization; and when the stage of man is done with, and only remembered to be marvelled at in history, he will be thought to have shared as little as any in the defects of the period, and most notably exhibited the virtues of his race. Generosity he has, such as is possible to those who practice an art based on science, never to those who drive a trade; discretion, tested by a hundred secrets; tact, tried in a thousand embarrassments; and what are most important, Herculean cheerfulness and courage. So it is that he brings air and cheer into the sick room, and often enough, though no so often as he wishes, brings healing."

INAUGURAL EXERCISES

THE ARMORY, 3:00 P.M.

PROGRAM

The Vice-President of the University Presiding

Academic Procession.

Music: Festival March, *Mendelssohn*; The University Orchestra.

Reading of the Ninetieth Psalm: The Right Reverend George F. Seymour, D.D., Bishop of Springfield.

Hymn: *St. Anne*.

Prayer: The Bishop of Springfield.

Address: The Honorable Charles S. Deneen, Governor of Illinois.

Address: The Honorable Samuel A. Bullard, President of the Board of Trustees.

Response: The President of the University.

Chorus: The Lord bless and keep thee, *Barnby*.

Address: The Honorable Andrew S. Draper, Former President of the University and Commissioner of Education, State of New York.

Music: Song Without Words, *Tschaikowsky*; The University Orchestra.

Inaugural Address: The President of the University.

Conferring of Degrees.

Benediction.

Recessional.

ORDER OF PROCESSION

PART I—THE ESCORT

Division I—The University Regiment.

Division II—The Undergraduate and Graduate Students: Members of the Freshman Class, men, women; Members of the Sophomore Class, men, women; members of the Junior Class, men, women; members of the Senior Class, men, women; members of the Graduate School, men, women; Members of the College of Law; members of the College of Medicine; members of the College of Dentistry; members of the School of Pharmacy.

Division III—The Alumni in order by classes, the class of 1905 leading.

Division IV—The Faculty of the University: School of Pharmacy; College of Dentistry; College of Medicine; College of Law; School of Music; School of Library Science; College of Agriculture; College of Science; College of Engineering; College of Literature and Arts.

PART II—THE PROCESSION

Division I—The President, the Trustees, Speakers, and Representatives of the State and Nation: The Governor of the State; The

President of the University; The Bishop of Springfield; The Ex-President of the University; The Speaker of the United States House of Representatives; Major-General John F. Weston, U. S. A., Representing the Department of War; The Junior Senator from Illinois; The President of the Board of Trustees; The Vice-President of the University; The Lieutenant-Governor of the State; The Trustees and Ex-Trustees of the University; The Treasurer of the University; The Speaker of the Illinois House of Representatives; The Comptroller of the University; The Secretary of the Board of Trustees; Candidates for Honorary degrees.

Division II—Representatives of Political and Administrative Bodies: Representatives of Foreign Countries; Member of Congress; State Officers; Judges; Members of the State Legislature; Municipal Officers; Boards of Education.

Division III—Representatives of Educational Bodies: Delegates from Foreign Universities; Delegates from American Universities and Colleges; Delegates from Learned Societies; Trustees of Colleges and Universities; School Superintendents and Principals.

Division IV—Representatives of Societies and Associations: Presbyterian Synod; Clergymen; Clubs; Agricultural Societies; Representatives of the Press.

ADDRESS

THE HONORABLE CHARLES S. DENEEN
Governor of Illinois

The inaugural ceremonies of this week, incident to the installation of Dr. James as President of the University of Illinois, mark an important event in the history of our State. The very general interest manifested in these ceremonies by our people indicates the confidence which the people have in him. These ceremonies are not only meant as a compliment to him, but are also an expression of the interest which the people have in the future of this institution. This is distinctively the people's University. It was not only founded by the people, but its organic law provided that it should be conducted for the people.

I have thought it might be of interest to speak for a moment on what has been at different times the ideal of the university.

In the Middle Ages, the university was conceived to be a means of methodizing, perpetuating and applying all past knowledge, and an instrument for taking up every new branch as it came successively into existence. The purpose of the university was primarily to train the mind and faculties of mind to the highest point of culture. This was a broad conception surely, but in those days a narrow view was

entertained of the subjects fitted for the purpose. These ordinarily included grammar, rhetoric, arithmetic, music, geometry and astronomy. Now it is easy to see that, important as these studies are, and admirably calculated to develop the mental powers, they are somewhat remote from that class of knowledge which in the present day is occupying a larger place in modern university education. I mean the knowledge which is susceptible of ready application to the subservience of the immediate needs of life, to the demands of agriculture and of the mechanic arts, and, generally, of manufacture and commerce. To be sure, in the days of which I speak, these had made so little progress and knowledge of them was in so unorganized a state, that they would have furnished indifferent media for the discipline and development of the mind. What I particularly wish to note, however, regarding them, is that having been established for a long time, they were permitted to occupy perhaps too large a place in modern universities.

A change was introduced with the growth of science and the challenge which the scientists issued in behalf of the claims of their favorite studies. These they claimed were not only equal to any studies as a mental discipline, but also of the greatest intrinsic value because they brought the mind into direct contact with the work of things, leading naturally to that original research which gives to man a mastery and dominion over the physical world.

This is the class of studies upon which Baconian philosophy bestowed the highest praise; the studies whose practical benefits were obvious; the studies which, to quote Macaulay:

"Enable man to lengthen life; to mitigate pain; to extinguish disease; to increase the fertility of the soil; to give new securities to the mariner; to furnish new arms to the warrior; to span great rivers, and estuaries with bridges of form unknown to our fathers; to guide the thunderbolt innocuously from heaven to earth; to light the night with the splendor of the day; to extend the range of human vision; to multiply the power of human muscles; to accelerate motion; to annihilate distance; to facilitate intercourse, correspondence, all friendly offices, all dispatch of business; to enable a man to descend to the depths of the sea, to soar into the air, to penetrate securely into the noxious recesses of the earth, to traverse the land in cars which whirl along without horses, and the ocean with ships", which run twenty-three knots an hour against the wind—and not ten as in Macaulay's day.

I speak of this change, or rather widening of the scope of instruction in universities, which came with lapse of time and the progress of knowledge, not with a view of adversely criticising the older system. In the study of knowledge then existing, it afforded perhaps a discipline of the mind the best attainable. Whatever their limitations, still as Gladstone had graphically observed of the old universities: "What

the castle was to the feudal baron, what the guild was to the infant middle class, they were to knowledge and to mental freedom." I speak of the narrow field covered by the old, only to praise the more varied and broader scope of the modern university.

It was but natural when education was estimated as possible for the few and privileged only, that those things which were of chief importance to the man of leisure should be given the first and largest place in the higher institutions of learning. There still remained, too, something of the idea of Plato, that to turn education to practical account, to devote it to the amelioration of man's condition, was not to put it to the best use. That the only noble purpose of education was to lead men to knowledge of abstract, essentially eternal truth, and that it was a sort of degradation of its high nature to apply it to any purpose of vulgar utility. But, with the growth of commerce and manufacture, and the intensification of industries which called for expert and finally for scientific methods in the conduct of business enterprises, it was found that the training for business and affairs might furnish quite as rigid a discipline for the intellect as did those studies, elegant or severe, which had theretofore held all but exclusively the field of university education.

Now the university, covering as it did the entire field of human knowledge, always conformed in some degree to the state of the society which constituted its environment. With this fact in mind, the idea which governed our intensely practical ancestors, in the establishment of the American system of state universities, is readily understood. When, in 1862, the act was passed which brought into being these great institutions of learning, the idea of the noblest citizenship was found not in the man of wealth and leisure, but in the man of action, especially that action which was useful in subduing the powers of nature to the purposes of man. A continent practically undeveloped was our heritage, and our fathers wisely determined that our popular institutions of learning should have for their mission the education of the youths of the nation in those studies which would best fit them for their manifest destiny, as pioneers in agriculture, mining and other industrial pursuits. Accordingly it was provided that the state universities should be maintained for the education of the children of the people "in agriculture and the mechanic arts, not excluding scientific and classical studies, and including military tactics."

For the purpose of carrying into execution the ideas outlined in the federal grant, the University of Illinois was magnificently endowed by that instrument with four hundred and eighty thousand acres of public land. It was hoped at that time that the states would assist in their maintenance. This hope has been realized many fold in this State. The public lands were sold for about half a million dollars.

The first appropriation by the State in 1869 was sixty thousand dollars. Twenty years thereafter it was eighty thousand dollars. The last appropriation, which was the largest, was \$1,512,535. The aggregate appropriations by Congress for the University of Illinois, in addition to the Land Grant, have been three hundred and forty-five thousand dollars. The aggregate appropriations by the State, \$6,291,552.90.

Over one-half of this amount has been appropriated by the State within the last six years, and three quarters of it within the past decade. The State now appropriates to this institution an amount equal to three-fourths of that given by it in aid of the public schools. Even with these vast receipts, the University is hardly able to keep pace with its progress and requirements; but it has held fast to its mission to educate the children of the people in all branches of human knowledge, none of which have been excluded by the instrument upon which it is founded, with special departments covering those branches of learning specifically mentioned, agriculture and the mechanical arts.

But it is needless for me to speak to you in detail of the branches of learning which now come within the scope of your institution. When I say it embraces the colleges of Literature and Arts, Engineering, Science, Agriculture, and Law; a Graduate School; schools of Music and Library Science, and colleges of Medicine, Dentistry, and Pharmacy, I have to say that the aim of the founders of our American state universities has been faithfully adhered to. The significance of this adherence to the federal ideal has been that the University of Illinois has become one of the most efficient instruments in the State for the development of its natural resources and this, not only indirectly through the training of students in the sciences and arts, but directly through the work of the Agricultural Experiment Station which has contributed so much to our knowledge of the physical situation of our State and knowledge of inestimable benefit to our farmers through their free publication and distribution of the bulletins issued by the Experiment Station.

Were this the proper occasion I think it would not be difficult to show that the benefit derived from this branch of university work, in the improvements of crops and of domestic animals, and in the development of hidden resources, can scarcely be overestimated, and considered as a matter of dollars and cents is one of the best investments which the State has ever made.

I have dwelt so far upon the tendency to the practical which is so obvious and characteristic of our state universities; the tendency to train the eye and the hand for the highest grade of work in the arts and for the successful management of great business enterprises. But the development of this tendency has by no means displaced the

pursuit of the more abstract studies. These still have their place and a very large place in our American universities. Philosophy and literature still attract a larger number of our young people and the professions claim their full share. But I think it is a sign of the soundness and healthiness of our institutions that the diversity of American pursuits and interests find their reflection in the character of our higher institutions of learning and that a thorough preparation for any useful career can be there secured. This is as it should be.

The American university should present the same aspect as does our society. It should be many-sided, broad and diversified; in short, a democracy of higher learning, fitted for the development of the human mind and of the human body and for the training of men and women for the multifarious and practical duties of American citizenship.

THE RELATIONS BETWEEN THE BOARD OF TRUSTEES AND THE PRESIDENT

• THE HONORABLE SAMUEL A. BULLARD
President of the Board of Trustees

The people of the State of Illinois represented in the twenty-fifth General Assembly accepted the endowment offered by the federal government and created a University for the State. The government and administration of the University were, in the wisdom of the people, placed in the hands of a Board of Trustees. Among other things this Board was charged with the duties of providing lands, buildings and equipment, and of appointing a President and a Faculty for the University. The Trustees are answerable to the people for their acts inasmuch as none may hold his office longer than for a period of six years without going to the people for a renewed expression of confidence and a commission for further service. The Board is further required to report every two years to the Governor of the State all its acts and doings for the information of the people and their representatives. The people therefore have chosen to place the conduct of this great educational institution upon twelve of its citizens who are directly responsible to them.

The organic law expresses certain conditions and requirements under which the University was to be operated, and aside from these few limitations the scope of the University was an open field. But the conditions and requirements imposed by the law expressed a great purpose of the people. In general terms they were that this University should have its prime purpose to be the thorough instruction of the sons and daughters of the common people in the higher branches of university education. It was the application of the common school system to the higher education furnished only by the universities.

No class was legislated against, all could enjoy equally the privileges of the University, but none was to receive advantages superior to or beyond those given to the people representing the bone and sinew of the State. These conditions and requirements affecting the University have been persisted in by the people to this day, and they are the subjects of their jealous care.

In the conduct of any great business, even of a business that is rapidly expanding, there are periods of advancement and of decline. Business enterprises like the sea have the rise and fall of the tides. They even have their storms and calms, all of which may be ominous of perils. New policies are to be tried and judged, new departments are to be organized or old ones reduced, or changed to suit new conditions. So it is in the conduct of a large institution of learning. One of the periods of deepest concern in its governing board is when there is a vacancy in the presidency. And one of the most difficult duties to perform, and one which affects more directly the general character and trend of the institution than any other, is the choice of a President. In the State University the President is the educational head of the University. The organic law charges him "with the general supervision of the educational facilities and interests of the University." The real power is in the people and the choice of a President of the University is important, in that the chief executive is so far removed from the source of authority. The relation between the people and the President of the University is much the same as the body of stockholders of a corporation to the president of a corporation. The Trustees and the President have much the same relation as the board of directors and the president of the corporation. The stockholders are incorporated together to accomplish certain specific ends. They choose a board of directors to determine policies and employ men to put those policies into effect who will produce the ends originally sought by the stockholders. If results fail, a change of administration and a change of policy usually follow.

The people of the State in their determination to establish a university had a definite end in view. They wanted a certain manufactured article, as it were, and that article was practical, well balanced men and women after having been given the highest university training in their several pursuits and professions in life. If this work is done right and the product in its service among the people is satisfactory, and answers the requirements of practical life, then will the people be mightily pleased and continue to express their approval of the administration and its policies.

The Board of Trustees should therefore be constantly sensitive to the wants of the people in educational subjects and call to its assistance those instructors and professors, and especially a President, who are

in hearty sympathy with the demands of the people and who are able to devise means by which the work can best be accomplished.

The relations of the President and the Board are intimate and mutual. They are bound to work together to an agreed end. They are bound to believe in the work of the University as prescribed in the fundamental law, and endeavor to constantly and systematically promote the work of the University in loyal support of the statute. The Board has certain great responsibilities. The President should share the work these responsibilities impose but should not assume them. By assuming them the President cannot lessen them for the Trustees. The Trustees cannot release themselves of their responsibilities by requiring the President to assume them. Nor should the Board presume to take upon itself the duties of the President. Whenever it does so it fails of its purpose and creates confusion.

The same law which creates the Board of Trustees and defines its duties and powers describes also the duties of the President. Therefore neither may trespass legally upon the duties of the other. Broadly speaking the duties of the Board are initiatory and legislative. It states what shall be done, and when. It provides all the facilities and equipments. It orders expenditures and audits and pays the bills. It regularly returns to the Legislature and to the people with the report of its work a statement of the results. It lays before them what is yet to be done and by what means it may best be done, and the anticipated expense of it all. In all the operations of the Board from the promulgation of its policies to its report to the people the most important factor is the presidency. The functions of the President in his relations to the Board can be expressed in the following divisions.

First, he is the educational executive of the Board and of the University. He takes the general policies adopted by the Board and puts them into operation. Details are to be devised so that the enactments of the Board may be speedily and successfully consummated. He keeps the organization in continuous operation without friction or undue loss of power. If parts appear to be weak he must strengthen them; if parts break they must be mended without stopping the general movement and with as little interruption as possible. If he finds some order of the Board unwise and impossible of successful accomplishment, he must make the most of it in a fair, honest trial till the Board is convinced of its futility and they abandon it. If funds are inadequately provided he must permit some of his loved projects to be pushed aside or abandoned, withal keeping a cheerful heart and placid face. If the Board persists in requiring him to perform duties which no man can do, but which truly belong to the realm of divinity, he must keep battering away at it, as though this were yet the day of miracles and fearlessly proclaim the fact that faith will remove mountains and cast them into the sea. He must have a capacity of doing

hard things easily, and disagreeable things happily. He must recognize at once where the cause of failure is in anything that has gone awry and have the skill and ability to quietly and successfully remove it without a surgeon's knife or an anesthetic. He must know how to amicably discipline an insubordinate instructor without alienating the affection of his friends for himself and to appropriately suspend a delinquent student who plays on the football team, without destroying the athletic fame of the University.

But soberly, the Board of Trustees expects him to be a man of great executive power, frank, openly honest, ready to accord to every one the chance to do his best, sympathetic with both teachers and students and fearless in the line of duty.

The Trustees have only periodic meetings at which they consider university matters; the President is in constant contact with trying work and the burden of responsibility falls from him for not a moment. Few persons, perhaps, even of the Trustees, realize the amount of exacting labor and protracted alertness which sap vitality that are necessitated by the duties of the presidency.

Secondly, he is the educational advisor of the Board. His judgment must be sound, his reasoning correct, his opinions footed on the best authority and his plans practicable. He must inform the Board what of its proposed actions are vagaries and what are sound policies. He must warn of danger, when all seems well. At the dividing of the roads he must interpret the sign boards faithfully, whether they be in Sanscrit or in modern English. He must have courageous convictions about salaries, the qualifications of instructors and the methods of promotions. His advice must be faultless upon the subject of fraternities and strenuous athletics. In other words he must keep the Trustees informed of all the educational good things that are good, and bad things that are bad. The situation which the President holds as advisor to the Board was expressed by a member a short time ago in this: "It is equal to a liberal education to be an active member of this Board a few years."

Thirdly, the President is the Board's educational representative. The Board's duty is not only to conduct a university for the State, but also to conduct it to the satisfaction of the people. There must be harmony of opinion between the people and the Trustees. If the people fail to advance with the expanding ideas of university education, they must be enlightened; if the Trustees are slow to establish and promote some line of advanced work which the people want, the Board must be prodded. The President is the harmonizer. He is the educational educator. His insight must be a sort of barometer which discloses the condition of the atmosphere and then he must lead those to higher altitudes whose clouds must be removed. His duty includes his being a pathfinder for the people in educational thought. He

must break the way to better things and patiently help all to an understanding of what the best is in scholarship, in citizenship, in duty and in life. With such a President there will always be an intelligent, able and responsible Board of Trustees. Their responsibilities are not lessened, but are most pleasantly performed. Under such conditions the institution prospers, its work enlarges, its scope widens, it gains enthusiastic friends and its blessed fruits are exceedingly abundant.

ADDRESS

THE HONORABLE ANDREW S. DRAPER, LL.D.

Commissioner of Education of the State of New York, Albany

The distinguished presence, the impressive procedure, and the function and purpose of this great University convocation are surely sufficient to make it memorable. Other gatherings for the discussion of many subjects of the highest import to higher education in America have been associated with this assemblage. The effort to accompany an installation with an educational advance has been distinct. The gracious attendance of the representatives of many American and of some foreign universities lends very substantial assistance to this effort. Taken together, the exercises may rival if not surpass any previous undertaking in the interests of the higher learning in the Mississippi Valley.

Of very considerable interest to all, the occasion is certainly of profound significance to this University. We are now at the very heart of the main business for which we came together. We are taking a step of the very first magnitude in our affairs. We are conferring a very great honor. We are imposing a very great burden. It is through the bestowal of a very great office. We are come not merely to ratify an appointment or to deliver keys, but to give to a new leader the expression of our confidence and the assurance of our help. We would not disguise our understanding of what it all implies to him, to us, and to all of the interests of this institution. We would invest this occasion with all seriousness. With solemnity we pledge our support. Realizing both the need and the meaning of it, we offer words of cheer and the best wishes which a buoyant and expectant people can lay at the feet of a new administration.

This is not the day for reminiscence, but it is the day for reflection, as well as the day of hope. Rational outlook rests upon a true understanding of what is and what has been. In university building the future can lift high its turrets only upon foundations laid sure and true. There is no better exemplification of American spirit anywhere than is found in the history of this University. Without any aid from nature but a rich soil, without a single helpful feature in the landscape, upon

almost an exact plain, without hill, or tree, or rock, or river, it has made a campus as homelike and ennobling as any one of us has seen. Without building materials in the neighborhood, it has erected buildings at once spacious and serviceable. With a school of architecture of its own, without close association with the best architecture of the world, with considerable of the feeling that a new building belonged to an architect who had been trained by the University, and that in time every graduate in architecture ought to be represented by a building, it has, in one way or another, which need not be specified here, worked out, or worried out, a very respectable collection of architectural effects. Located between and across the borderline of two small cities, it has risen above their rivalries, made them useful suburbs, and given them a useful mission—even the housing of the people of a university. Started in an environment not specially conducive to scholarly pursuits, it has developed a setting which is beginning to support its work admirably. • Far from the geographical or popular center of the State, it has overcome distances and become a conspicuous spot on the map of Illinois. Without a large city to draw upon for students, even beset with deep prejudices and sharp rivalries, it has filled all the highways with happy young men and maidens, coming to or going from its work. At a distance from large libraries and without free association with the centers of scholarship, and until now with very inadequate support, it has built up an instructional force exceptionally able at many points and of very satisfactory average strength. Under the disadvantages as well as the advantages of a popular support and a democratic management, it has become widely celebrated for its unparalleled growth, and has fought its way to a very high place in the list of large American universities. One hundred out of the one hundred and two counties of Illinois, forty-three other states, and eight foreign countries are represented in its student body. In the breadth of its offerings and the measure of the loftiness of its ambitions it is second to none. When it was robbed of most of its invested and much of its operating funds, it succeeded in three weeks—with the help of the Legislature and Governor—in converting its discomfiture into better securities than universities ordinarily have,—good, five per cent. everlasting bonds of the commonwealth of Illinois. Later than all neighboring state universities in getting started, and exceedingly slow in gaining moneyed support, it has at last won the genuine pride and generous confidence of a State which can do whatever it will,—for which all of us make most sincere acknowledgments in the hope of yet larger favors still to come. Drawing upon other universities and all other sources of supply for all it can get, it is increasing its contributions to the scholarship of the country and doing more than was ever foreseen to train the young men and women of a rich and imperial State to the

serious business of making the most of themselves through intelligent and tiring work of every kind and through a rational use of the results of commercial and industrial prosperity.

This State is fortunate in that its State University and its Agricultural and Mechanical colleges are being developed together. The work of each supports the other. It is producing a very large institution, one with broad foundations and innumerable offerings. With all of the departments here where there is small need of physicians, its medical colleges are where medical men are most in demand and at the largest center of medical education in the world. All in all, it is accumulating students with a rapidity which is creating a responsibility beyond compute.

We all know this, but it is well to express it. It gives us strength. We are equal to it. By common assent and intuitive impulse this institution is now to be made great as well as big. The state university development in America is one of the very greatest as well as the most surprising movements in world education. It is the logical outgrowth of the democratic advance. Few will say that the state universities are not already as potential as the universities which have preceded them. In opportunities to serve a people through the applications of learning to diversified life, as well as in the aspiration and the strength to make that service great, they are ranking university operations everywhere. Illinois expects to lag behind no other state in the generosity and the intelligence of her doing for the higher learning. She provides the means and calls the best men she can get for her service. Then she wants a new advance. She will not temporize with opportunity. She will not tolerate excuses. She will go forward. With profound regard for all the states around her, with the warmest appreciation of the aid she is getting from other universities, and the most unqualified assurances of reciprocity, the key note of this great week at the University of Illinois sounds a decided advance to higher and stronger ground.

One who has the gifts and the strength to lead this advance is to be envied the opportunity. I wish I could compound the thinking and express the reflections and the hopefulness of us all. The suggestions born of my thinking and my experience which bear upon this hour and the future of this University are in these plain and fundamental, briefly stated propositions:

Serve the commonwealth of Illinois, not only in her industries, but in her political theories and practices, in rearing noble ideals of true culture and in strengthening her conception of the moral obligations of such a people. Do it when sure of your ground, even though it involves the saying of some things which, at the moment, many of her people may not like to hear.

Aid every educational activity, whether public school or parish

school or proprietary school, whether endowed college or professional school, or private or public library, or study club, or whatever else it may be, if it has the purpose of enlarging knowledge or extending culture in or out of the schools. Be true to every other university. Never forget that meanness defeats itself. In education the way to get rich is through enriching others.

Bring to this University the best scholars who can be procured in any part of the world. There are no artificial barriers and no political boundaries in the democracy of learning. Pay what you have to pay in order to have the best instruction in the country. This is one of the leading things for which the last administration was disposed to give way to the new one. The old one could have gone on in the old way. It was believed that a new leader could take some important steps more surely than the old one. If not taken, an opportunity will be lost. He is here to fill the gap of opportunity to the full. Let the fact be established and let the country come to know that no more new truth is likely to be dug out anywhere, and no better instruction provided anywhere, than at the University of Illinois.

Develop young men in the faculties by giving them their opportunities; and assure them just credit for all the work they do. Do not stunt them by letting them think that they are so very much larger than they really are.

Enter into student sympathies and share student outlook. Brace up the timid and the hesitating. Find ways to put surplus energies to useful ends. Give all plenty of good work to do. Forgive the ones who are a trifle too active but not so very bad. Let the vicious know that there is no place for viciousness in the affairs of a university. Command the situation through the stirring of sentiment, through the development of opinion, and through reliance upon that moral sense which in the last analysis is always overwhelming in a university crowd.

Let justice and sense stand, whoever falls. Let there be a day in court for all. Be as just to a student when a teacher is at fault as to a teacher when a student is in trouble.

Fight for absolute cleanliness. Insist that everything shall comport with the purposes of such an institution. Demand that everyone in the service shall have undivided devotion to the work which he undertakes. Avoid expenditures which do not commend themselves to the good sense of sane and experienced men. Reject all extravagances. When money is expended see that a dollar buys the value of a dollar. Stand for nothing until convinced; shrink from nothing merely because personal interests are in the way.

Mr. President, administer your splendid estate, and execute the high purpose for which this great aggregation of material things and of intellectual and moral forces is maintained. Do it without fear or

favor, without thinking much of the hazards or of the compensations, and the people of the commonwealth of Illinois, and the Almighty God, will take care of you.

The real growth and strength of this University have hardly appeared. The future will overshadow the past. Hearts, minds, money, boundless energy, the public interests and the common pride are all enlisted to carry the University of Illinois to a place of the very first significance in American education. All that is wanted is a scholarly, a sane, and a fearless leadership. If one cannot supply it, another will. With one accord we think we have found the man who can.

I am transferring to him not only a title but an opportunity; not only an office but my hope and my confidence that he may enlarge it. I did not impair this office; it is a greater office than it used to be.. It is as precious a thing as I shall ever have to give. Before I could transfer it with cheerfulness and with confidence there has been need to think more deeply than have many others of the needs of the situation here and in another state, and of the adaptation of men to differing work. My attachments are no stronger there than here. The decision came out of a mental process which has tried out feeling and broken some strings. The new President has been an all-important factor in the case. But I am ready. The attributes of the new leader give me confidence and the universal acclaim makes me know that all is well.

A true son of Illinois; with the fine lineage of her best pioneers; with native pride in her history; with scholarly appreciation of her resources and of her intellectual development; with a mature and balanced understanding of her needs, as well as with patriotic enthusiasm for all that may uplift her; a severe student, trained in the best schools of the world; a virile teacher; a publicist of wide reputation; an experienced and trenchant administrator: we envy him the gifts and the opportunity which will let him impress lives, shape ends, weave his name into the history of this University, and add to the greatness of his State; and we give him all the cheer that can spring out of song, with all the sincerity that can breathe through prayer.

INAUGURAL ADDRESS

THE FUNCTION OF THE STATE UNIVERSITY

EDMUND J. JAMES, PH.D., LL.D.
President of the University

The University of Illinois owes its foundation to the initiative of the federal government of the United States.

The celebrated Morrill Land Grant Act of July 2, 1862, provided that each state in the Union should be granted thirty thousand acres of land for each senator and representative to which the state was entitled in the federal Congress, for the establishment and support "of at least one college, whose leading object shall be (without excluding other scientific and classical studies, and including military tactics) to teach such branches of learning as are related to agriculture and the mechanic arts, * * * in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life."

This has turned out to be one of the most magnificent endowments of higher education ever made by any government, church or individual, whether we have regard to its immediate effects in leading to the establishment of the particular institutions contemplated in the act, or to its remoter effects in further increasing and stimulating state benevolences for this same general purpose.

As the result of the said grant, at least one institution corresponding to the above description has been established in each state and territory in the Union. There are now more than forty-nine in all! The states have in nearly every instance contributed to the further endowment of these colleges in the form of permanent funds or what is practically the same thing, in the form of permanent annual appropriations, exceeding, and in some cases far exceeding, the amount given by the federal government itself.

In some instances the new college was incorporated in, or annexed to, some existing institution. In others it was made an entirely independent institution limited to instruction in agriculture and the mechanic arts. In still others it became the nucleus of a great state university, with all the departments properly belonging to an institution which may justly lay claim to that time-honored name.

This was the case in Illinois. The proceeds of the sale of this original land grant constitute an endowment fund providing about thirty-two thousand dollars a year for the support of the institution.

In 1887 the federal government passed an act known as the Hatch Act, providing an appropriation of fifteen thousand dollars a year, to each state in the Union, for the establishment and support of an agri-

cultural experiment station. This, in the State of Illinois, was made a department of the State University.

In 1890, by what is known as the second Morrill Act, the federal government appropriated an additional sum of fifteen thousand dollars a year, to be increased by one thousand dollars annually until it reached the sum of twenty-five thousand dollars a year, for the further endowment of colleges of agriculture and mechanic arts, founded on the act of 1862. This sum, in Illinois, was naturally also turned over to the State University, so that, by these various federal acts, the University of Illinois now receives, either directly or indirectly from the federal government, about seventy-three thousand dollars a year, to be applied in the maintenance of an agricultural experiment station, and the colleges of agriculture and mechanic arts.

The State of Illinois has added largely to this sum of seventy-three thousand dollars for the support of these two enterprises. The last Legislature, for example, appropriated four hundred thousand dollars per annum for the support of these departments, or more than five times as much as the federal government. In addition it also appropriated considerable sums for the support of other departments which, although not mentioned specifically in the Land Grant Act of 1862, were contemplated by the words "not excluding other scientific and classical subjects."

In other words, the State of Illinois has not only applied conscientiously to the purposes of the federal act all the funds which the Congress has provided, but it has actually appropriated five times as much for these same purposes as the federal government itself. In addition it has provided for the other departments necessary to transform the original college of Agriculture and the Mechanic Arts into a full-fledged university of the modern type.

The comparatively small sums thus appropriated by the federal government has led in the sequel to the expenditure of ten times as much for higher education by the State of Illinois. The other states have followed in the same general path, so that it is doubtful whether a similar expenditure of funds to that made by the federal government on this occasion ever led to proportionately greater returns for higher education, in the history of any time or country.

The University of Illinois has become the largest of the institutions which owe their origin to this federal grant. Opened for work on March 2, 1868, with fewer than one hundred students, its growth for the first twenty years was very slow, as the State at first declined to give very largely in addition to the federal grant. Indeed, it seemed inclined for a time to limit the institution strictly to the work of a college of agriculture and mechanic arts, in the narrowest sense, as was indicated by the name first selected for it, namely, "Illinois Industrial University," and by the refusal of the Legislature to do more than apply in good faith the proceeds of the federal grant to its support.

But about the year 1887 a new spirit became manifest. The Hatch Act, furnishing additional funds for the support of scientific work in the domain of agriculture, seems to have been potent in stimulating this new attitude. As a result of the activity of the alumni and of other friends of higher education in the State, the Legislature was prevailed upon to change the name to the "University of Illinois."

What is in a name? Sometimes much, and so it was here. Giving this name—the University of Illinois—to the institution, if not at that time an indication of a conscious change of purpose on the part of the people of this State, powerfully helped, at any rate, in working out this change of purpose and bringing it to the public consciousness.

It did not, of course, immediately produce large results, and even so late as 1890 the Faculty of the school numbered only thirty-five, and the student body, four hundred and eighteen. Since that time, partly as a result of the impetus given by the second Morrill Act of 1890; partly as a result of the changed attitude on the part of the State toward the institution, evidenced, even though unconsciously, in this change of name; still more, perhaps, as a result of that marvelous increase of popular interest in higher education manifested throughout the country in the last fifteen years; the Legislature of Illinois has became more and more liberal in its appropriations, enabling the institution to approximate with an ever-increasing rapidity toward the ideal expressed in its name, "The University of the State of Illinois."

The increase in the attendance and in the instructing body has been remarkable. The Faculty has grown to number nearly four hundred and the total number of matriculants in all departments for the present year will probably reach four thousand.

This rapid increase has been partly the result of adding new colleges—in some cases existing colleges with an honorable history and a considerable attendance, as in the case of the Colleges of Medicine and Dentistry—and partly the result of increased attendance in the older departments.

To the original colleges of Agriculture and Mechanic Arts, contemplated in the first act (including engineering and architecture), have been added the colleges of Liberal Arts, of Science, of Law, of Medicine and Dentistry, and the schools of Music, of Library Science, of Pharmacy and of Education.

In the College of Liberal Arts and the Graduate School connected with it, are included the ordinary subjects of instruction embraced in the modern university so far as they are not included in the other schools and colleges mentioned, except those belonging to a theological school.

Associated with the University are, besides the Agricultural Experiment Station already mentioned, the Engineering Experiment Station (the first of the kind in the country); the State Geological Survey;

the State Laboratory of Natural History; the State Entomologist's office and the State Water Survey.

Such is the University now. What is to be its future? At the risk of incurring the fate of a prophet I will undertake to forecast the future of this institution to a limited extent; and I do it with more confidence because the history of other state institutions has already indicated some of the things in store for us—institutions in whose footsteps we are sure to follow, and if at first *longo intervallo* yet with increasing determination to press them ever harder in all those things which pertain to a true university.

I take it first of all, then, that this institution is to be and to become in an ever truer sense, a university. That, I presume, has been settled once for all by the people of this State. It was settled, even though unconsciously, when the word "industrial" was stricken out of the title, leaving it simply "University of Illinois"—by no means the first time that the subtraction of a word from an expression has indicated an addition to the meaning.

It has been settled anew at each successive session of the Legislature, as by one increase after another in the appropriations the representatives of the people in the general assembly have set the seal of their approval on the large and wise policy of the Trustees.

It has been settled by the ever-increasing purpose of the great mass of the people of this State, the plain people of the farm and the mill, of the country, the village and the city, to build here a monument which will be to them and their children an honor and a glory forever, an evidence which all the world can see and understand, of their corporate appreciation of the things of the spirit.

What then is a university—that which this institution is to be and become?

Men of different nations and different times would give different answers to this question. Nay, men of the same nation and of the same time would give different answers. In fact so different would be the answer given by different men in the United States at the present time, that one might well wonder whether there is any common agreement as to what a university really is.

I must, therefore, answer this question for myself, for this time, and this place, and this institution without, however, reflecting in any way upon what other institutions bearing this name are or may become. I believe that the system of institutions which shall satisfy the educational demands of a nation like this must embrace higher institutions—universities if you will—of many different types. In sketching out the future of the University of Illinois, therefore, I do so with due regard to the fact that we have in this State important and valuable institutions of an entirely different type whose work the University of Illinois will thus supplement and complete.

I should define a university briefly as that institution of the community which affords the ultimate institutional training of the youth of the country for all the various callings for which an extensive scientific training, based upon adequate liberal preparation, is valuable and necessary. You will note the elements in this definition. By virtue of the function thus assigned to it, it is in a certain sense the highest educational institution of the community. It is the institution which furnishes a special, professional, technical training for some particular calling. This special, technical, professional training must, however, be scientific in character, and must be based upon adequate preliminary preparation of a liberal sort.

By this requirement of a liberal preparatory training, the university is differentiated from the technical school or trade school of secondary grade. By the scientific character of its training, it is differentiated from a mere preparatory "cram" school for public examinations; such as were so many of our private professional schools down to a recent date.

There are certain things, then, which must mark this institution in order to make it a true university. The most striking peculiarity is the scientific character of the training which it affords. A consideration of this feature—for to my mind it is the fundamental and distinguishing quality of the university—may properly delay us for a moment. There are many ways in which a man may be prepared for a profession. He may have no school training whatever of a special or professional kind. Having acquired a knowledge of the elements of learning, he may be thrust directly into the practice of a profession in order to learn "by doing." This has been characteristic of most of our professional work in this country down to within a recent date. But even when schools have been organized to afford such training, they may still be of very different kinds. Thus they may be merely institutions to purvey what is already known in the profession, their purpose being to fill the minds of their pupils with knowledge of what at present is known about the subject in hand; perhaps to enable them to pass a state examination which may be prescribed in this particular field, or to pass a university examination set for the purpose of testing one's knowledge rather than one's power.

A school may, on the other hand, be organized on the theory that the best way to prepare a man for practical duties of a profession, so far as it can be done in school, is to train him to be an independent investigator in the domain appropriate to the profession. Thus, from this point of view, the best way to prepare a man for a professorship in mathematics would be to train him in mathematics in such a way and to such a point that he might have a power of independent judgment in the domain of mathematical problems; that in an independent way he might discover the possible mathematical problems for him-

self and be equipped to handle them one after the other as he might have occasion or opportunity to take them up. In the same way the best training for a lawyer or a judge would be such a training in the science of law as would enable him to have a power of independent judgment on any legal question he might meet, such as would qualify him to take up with entire freedom and with a feeling of ability the investigation of any topic which might come before him.

It is this latter idea which underlies the German university and the German professional school. According to the idea of the Germans the way to prepare a man to become a professional chemist is not to load him down with all the knowledge of chemistry which the world has thus far accumulated, though such an acquisition under certain circumstances may be valuable, but to train him in the field of chemistry in such a way as to make him an independent investigator —one who will be qualified to meet any chemical problem coming up in the course of chemical work. In the same way, to prepare a man to be a professor of history is not, according to the German idea, to fill him up with the knowledge of all historical facts, for such facts have already passed, in their multitude and magnitude, beyond the power of any man to grasp, even that of a von Ranke; but to give the man a historic sense, or at least to awaken it in him (for if he has it not it would be difficult to create it entirely anew), to develop his critical spirit, to qualify him to take up the investigation of any particular historic problem in such a way that when he has finished his investigation the last word will have been said, so far as the existing material will permit.

In addition to this, the purpose of the professional school should be not merely to qualify the student to do this kind of research, but to inspire him with an ambition actually to do this kind of work to the extent of his ability, whatever the position to which he should be called.

I do not know to what extent this peculiarity in the conception of a true professional school may explain the leadership which Germany enjoys today in the world of science and scholarship, that is to what extent this peculiarity in their educational system has produced this thirst for scholarship and learning, or to what extent their natural thirst for scholarship and learning has worked out this peculiar device for stimulating such a spirit. Whichever may be true, I think we must allow that in this particular quality the German university surpasses those of the rest of the world.

They carry this thought much further in Germany than in any other country. No man is allowed to teach, even in a secondary school of the first grade, who has not come under the influence of the theory and practice of this sort of a professional school. And while the German universities, judged from an American point of view, have many

defects, this is certainly one of their strongest points, and one which, if we can in any way secure for ourselves, in our own institutions, would be a great advantage to us.

It goes without the saying that in such an institution as we are outlining the faculty will consist of men and women who will have developed this quality of scholarship, this idea of learning, this notion of productive work in the field of scientific investigation and research. It cannot be anything else and accomplish the ends we have in view. Now, of course, there is a long road to travel between our present situation in this respect and that time when, judged from this point of view, we shall be a true university. I say a long road, but it will be covered, I fully believe, in a comparatively short time; for the idea of this advance has already permeated this body of instructors, has touched with its dynamic force every aspiring soul in the group and will in the long run leave no individual untouched, and will leave no person unaspiring.

What this spirit, if it could become general, would mean for our scientific advance as a nation, what it would mean for our industrial improvement, surpasses almost the power of the human mind to conceive. Suppose every one of our high school teachers in this country had had a university training in the sense in which I am using the term, so that when he goes into a community and begins his work of instruction there also goes into that community a new power, a new force, being itself first of all productive, and then aiming to select from that community the young minds which may have it in them to add to the power and resources, to the wealth, moral, intellectual and material, of their communities, and kindle in them the sacred flame of aspiration, as only the genuine fire of scientific enthusiasm can kindle it. Suppose every student who goes forth from this chemical laboratory should carry with him the power and the determination to add something to our knowledge of chemistry, what an addition to the industrial resources of this country! It would mean more than the annexation of many fertile islands beyond the sea, and would cost far less.

In brief, then, this institution must become, in all departments of professional life, a great center of scientific research and investigation, and must become so, if for no other reason, because the professional training itself cannot be of the highest type unless it be given by men who are qualified for and eager for scientific effort.

This University will include within itself not merely the old professions—law, medicine, teaching—but will include scientific preparation for any department of our community life, for the successful prosecution of which an extensive scientific training of this kind is desirable or necessary. We shall add, therefore, from time to time schools or colleges which will take care of these new professions as they

may appear. We have already begun with the profession of engineering in all its various forms—mechanical, civil, electrical, sanitary, chemical, etc., the profession of architecture and the profession of farming. The next to be entered upon in a large and satisfactory way is the profession of business. Some of these newer callings are, of course, quite different in their character, and will call for a quite different kind of training from that of the old so-called learned professions. It will hardly be possible to turn through the halls of our universities, even though they be multiplied many fold, all those who expect to enter in one capacity or another the great world of business. And for many a long day to come the great geniuses in this department will probably be men who have had no university training; for the "wind bloweth where it listeth" and many a genius will sprout and bud and flower in this domain who has not seen even the outside walls of a preparatory school or college or university. But we have already reached the time when the subject matter relating to the world of business has a content which is susceptible of scientific treatment, the study of which, under proper conditions, may become a valuable element in the preparation for business. The time has come, therefore, when the college of commerce should be one of the constituent colleges of the university.

So I expect to see this institution increase the number and quality of its professional schools as the years go on, until it will have developed into a full-fledged university of the broadest scope, capable of answering to the multiform needs of a great commonwealth.

In a word, this institution will most fully perform its duty to the people of this State if it will stand simply, plainly, unequivocally and uncompromisingly for training for vocation, not training for leisure—not even for scholarship *per se*, except as scholarship is a necessary incident to all proper training of a higher sort for vocation, or may be a vocation itself, but training to perform an efficient service for society in and through some calling in which a man expresses himself and through which he works out some lasting good to society. Such training for vocation should naturally, and would inevitably, if the training were of the proper sort, result in the awakening of such ideals of service as would permeate, refine and elevate the character of the student. It would make him a scholar and investigator, a thinker, a patriot—an educated gentleman.

It is apparent to any one who knows the present condition of the University, and for that matter of any of our American universities, that such a conception as this calls for a continued growth at the top and a lopping off at the bottom. In other words, it requires an increasing standard of admission to the university, and an extension of the scientific character and quality of the work done inside of the university. And this development I consider will be as inevitable as the ebb and

flow of the tides. My own idea is that the university ought not to be engaged in secondary work at all; and by secondary work I mean work which is necessary as a preliminary preparation for the proper pursuit of special, professional, that is scientific, study. Consequently, our secondary schools, our high schools and our colleges will be expected to take more and more of the work which is done in the lower classes of the various departments of the university as at present constituted, until we shall have reached a point where every student coming into the university will have a suitable preliminary training to enable him to take up, with profit and advantage, university studies, in a university spirit and by university methods.

Every community in this country ought to furnish the possibility of securing this secondary training as near as possible to the heart of the community itself. Certainly every town of fifty thousand inhabitants, and, perhaps, every town of twenty thousand in the United States—surely every county in this State—should be able, through the activity of either public agencies or of private beneficence, to offer the facilities for acquiring this secondary grade of education which is appropriate to the high school and the college. Surely it is true that the work done at present in the freshman and sophomore years at the University of Illinois, and for that matter in any of our American universities, may just as well be done, so far as the quality of the work is concerned, at any one of fifty or one hundred centers in the State of Illinois, as at Urbana; provided only that adequate provision be made for giving this instruction. And this adequate provision need not be very expensive. There comes a time in the growth of attendance at any institution, when it reaches its maximum efficiency. I have no doubt myself that in another ten years, unless we should have some great economic setback, there will be ten thousand students in the State of Illinois, who will want the kind of work and the grade of work offered in the freshman and sophomore years of the University of Illinois. Now it is to my mind perfectly apparent that it would be undesirable to have ten thousand freshmen and sophomores in the State University at Urbana. It would be far better to have them scattered over the State at fifty other institutions, provided we can get these institutions to take care of them properly, and then send those of them who may desire the more advanced work up to the University.

So then, the institution must be lopped off at the bottom and expand at the top in order to become that true university of the State of Illinois which will render the largest service to the people of this community. We have in the development of our College of Agriculture a very excellent illustration of how, with the growing standards of this State, an individual professional school will gradually change its entire character by the continued raising of its standards. Thus

far we have been practically accepting in the college of Agriculture any young man who desires to avail himself of the advantages for instruction offered here, and who seemed to the Faculty likely to be able to do the work, without reference to his formal preparation. At the present rate of growth, in another ten or fifteen years there will be five thousand young people in this State who will want to pursue these studies. It would not be possible or desirable to take care of these five thousand people in the College of Agriculture at Urbana. I expect to see secondary schools of agriculture established at different points in the State where those who wish technical work of secondary grade can secure it near home, and from these the best trained and best fitted will be sent up to the College of Agriculture at the University of Illinois for their advanced training.

One may ask, at what point will you cease to raise these standards of admission? I think the answer to that question is very simple, namely, when we shall have succeeded in requiring from the young men and women who enter the University that degree and kind of preliminary education which, from a pedagogical and a social point of view, best qualifies them for the beginning of special, *i. e.*, scientific, training.

You will see from the above sketch that I look upon the university as an institution for the training of men and women, not of boys and girls. The latter, I think, is distinctly the work of the high school and the college, and the sooner it can be relegated to them, the better for the young people themselves, for the schools and colleges, for the universities and for the community. I have no doubt myself that when our educational system is as fully developed as are our commerce and our manufacturing, we shall see this differentiation of function.

But this institution will be and become not only a university in general, but it will perfecly be a particular kind of university. It is and will remain a *state* university, and certain consequences for its future flow from this fact.

The first thought in this connection is one of limitation. As a state university in America, there are certain things which it cannot undertake, at least within any period which is worth our while to prognosticate for it. The old traditional university of the Middle Ages and later times consisted primarily of the three faculties of law, medicine and theology. The philosophical faculty was later added and in a few instances still another faculty was added, making usually four and sometimes five in the typical university.

The theological faculty was thus from the beginning an essential part of the university. It was an element of the university idea. A university without the theological faculty can hardly be looked upon, from a theoretical or historical point of view, as a complete university. Certainly the vast majority of thinkers would say that the absence

of a theological faculty is a serious defect in an institution which aims to be a complete university. From the standpoint of the church I have always felt that it was a great disadvantage for it to educate its priests or clergymen in theological seminaries isolated and monastic instead of in theological faculties forming part and parcel of a great university which is itself in many respects a microcosm and life in which prepares for the great life of the world outside.

But in this country, of course, the state university cannot undertake to establish a theological faculty for a long time to come, if ever; in fact, not until there is a substantial agreement on the question of religious beliefs and practices, at least so far as fundamentals are concerned. This day is certainly far in the future, and until it comes, the state universities in this country will certainly not organize or support theological faculties.

But we have gone somewhat further in our actual practice than our theory of separation of church and state might call for and we have cut from our curriculum of studies all courses bearing upon religion, even upon the history of religion. I cannot help thinking myself, that this is a serious limitation both to the university and to the church, none the less real and serious, because under our circumstances it may be necessary as a condition of development of the highest usefulness of the state university.

Let us not make a mistake here, however. The cutting out of formal religious instruction from the curriculum does not mean that a state university is necessarily non-religious, or anti-religious. An institution is religious or the opposite chiefly because the community of which it is a part is religious or the opposite. The character of the state university, like that of all the other institutions of the country, will be determined fundamentally by the character of the people itself. How true this is in matters of religion may be seen by the actual facts concerning our state universities. Thus, all of you who have followed the work of the Young Men's Christian Association must have been struck by the fact that it has no more active and vigorous centers of life than those in our state universities, and the international secretary of the association stated some time ago that the largest, strongest and best organized college Christian Association in the world was to be found here among the students in the University of Illinois. Religion, the religious spirit, the reverent attitude and all which is bound up with what is best in religion is not something, of course, which can be shut up within the dry bones of statistical tables, and yet the figures collected by our young people who have been interested in this matter show that there is very little difference between the number of students who are members of the church, for instance, at our state universities and at the other great educational institutions of the country—which would seem to bear out my propo-

sition that the fundamental fact is not after all the presence or absence of religious instruction, but rather the character of the community from which the members of the state university are drawn.

At the same time, any one who is a believer in the state university and its function cannot help regretting the feeling which certainly has prevailed in certain circles in the past if not in the present, that the state university is in a certain way anti-religious in its atmosphere and its work; for we can not close our eyes to the fact that whatever you or I as individuals may think of religion and religious training, the great mass of the people of this nation are deeply concerned that their children should be brought under what they conceive to be proper religious influence early in life, and should remain so throughout the college and university years.

It is then a matter of congratulation to those of us who have seen in this opposition to the state universities a certain menace to their prosperity, that there are many signs that this particular difficulty is going to be met in what will be an extremely satisfactory way to all concerned. The great religious denominations have come to recognize that these institutions are destined to grow and increase with every passing year, and that the state of which they themselves are a part will never agree that the principle of the separation of the church and state shall be infringed upon to the extent of providing religious instruction in state universities, and that therefore the duty is upon them to see that adequate provision is made for this great need. They are solving it in different ways. They are in some instances erecting guild houses and dormitories where the children from the families of their particular faith may find centers of influence and help. In other places they are providing lectureships upon religious subjects for the benefit of any students who choose to attend. In some places they are beginning to imitate the Canadian system so well exemplified in the University of Toronto, of organizing local colleges with the specific purpose of offering instruction in religious topics and in other subjects which the state university may not adequately support, for the benefit of students who desire to take such work.

For my own part, I believe some such device as this last named will be found to be a very satisfactory and helpful one, and that by this means we shall solve this problem, which is none the less real and serious because we have too often been inclined to close our eyes and ears to the facts and refuse to consider the question, imagining that if we could only bury our heads in the sand we should be free from the necessity of meeting it and grappling with it. When we can combine the freedom of the state university with the opportunity for instruction in religious matters which the great mass of our people holds to be desirable and necessary to true education, we shall have taken a long

step toward solving not only this particular problem, but many others which touch it and ramify from it in many different directions.

But if the first thought growing out of the fact that this is to be a state university is one of limitation, the second and prevailing thought is one of freedom, of privilege, of ease of movement, of facility, of adaptation.

No one will certainly accuse me of underestimating the work or importance of the non-state university. I owe my own education entirely, after leaving the public high school, to the non-state school, particularly to the denominational, if not sectarian, school, and my own work as professor and president has been, until I came here, entirely in connection with such schools. Northwestern, Harvard, Pennsylvania, which though in name a state, is in fact a private institution, and Chicago represent the course of my student and professional life. No one, I believe, can entertain a deeper feeling of gratitude to these institutions and to the men who have founded and built them up, than I. No one can have a higher appreciation of the value of their services to the community than I, and I may say that the more I learned about each of them, the more I was impressed with the magnitude of their service to the community.

The University of Chicago, for example, has not only done the ordinary service which any well equipped institution of higher learning does, but it has played a most important part in advancing the standards and educating public sentiment on higher education throughout the Mississippi Valley. It is not too much to say that every institution of college or university grade in the Middle West has profited directly or indirectly by the magnificent work of this institution—and by no means the least among them, the University of Illinois. It may not be out of place for me to say that the University of Chicago has been in large part, from this point of view, William Rainey Harper, whose absence we so much regret on this occasion. If Chicago University had done nothing else in the last fifteen years than provide an opportunity for the blessing-bringing activity of William Rainey Harper it would still be worth to the community all it has cost.

But even if I owed no personal debt or obligation to these institutions, if I had never for an hour enjoyed the benefit of instruction within their halls or from any one who came from them as teacher, still I should certainly be a blind, ignorant guide indeed if I should by any remark of mine belittle these institutions or derogate in any way from the glory which properly belongs to them. We believers in state universities, whatever we may think of the future, must certainly acknowledge that we owe everything that we have been, and almost everything that we are, to these non-state institutions. If the history of American education were to be closed today, certainly the chapter devoted to the work of the state university would be very short and

unimportant, indeed, as compared with that which should relate the history and services of the non-state institutions—Harvard, Yale, Brown, Columbia, Princeton, Leland Stanford, Dartmouth, Oberlin, Johns Hopkins and the hundred others—what a galaxy! and how proud we all are of them and their work! No thoughtful man, it seems to me, however much he may desire that our State University should wax, would like to see these non-state institutions wane, and I believe we should all feel that anything which would injure the efficiency or the work of any one of these institutions would be a calamity pure and simple.

In my own view, Northwestern, the Armour Institute of Technology, the University of Chicago, Milliken University, and the score and more of other non-state institutions engaged in the educational work of this State, are a vital, fundamental and essential part of the life of this community. I cannot, of course, foresee how many of the numerous small colleges in this State are destined to survive. Some of them, perhaps, may disappear. Others, I believe, will be newly founded. All of them, and more too, will be needed when the population of this State shall be ten millions, as it will be before many years. But even for the present I cannot help feeling that any means by which such institutions as Lake Forest, Knox College and the Wesleyan and McKendree and Illinois and Shurtleff and St. Ignatius and a dozen others can be enabled to do their work in a thorough and efficient manner, will be a cause for congratulation to every lover of education. We are all part of the same enterprise, engaged in working out the educational problems of this great commonwealth, and that enterprise is going to be the greater and the more glorious in proportion as each of us is enabled to do fully and faithfully his part and portion in the work.

I am a great believer in the desirability, nay, from certain points of view, the necessity, of a complete scheme of state education from the kindergarten through the professional school. I believe the state owes it to itself, to its own people, to the nation, to provide such a scheme of education.

But I have never felt that the system of state education should be monopolistic in character, should be exclusive, *i. e.*, should try to cover the entire territory and the entire field to the exclusion of church or private agencies. The extent to which the private institution has been driven out of the field in Germany and France has been and is a serious intellectual, material and spiritual loss to both these countries. On the other hand, the extent to which higher education has been left entirely to private hands in England has been equally serious and damaging to the interests of that country. The extent to which we have brought about a coöperation between the principle of public and private initiative in the field of higher education is a striking illustra-

tion of our good fortune, if not of our insight—for after all it has been largely accidental. It is desirable that the State of Illinois should have a state university, no matter what the church or private individuals may do, no matter how many institutions these may build up by its side. It would be equally *undesirable* if the State of Illinois should attempt by either direct or indirect coercion to drive everybody desiring higher education into the State University. Northwestern University, and Chicago University, and the Armour Institute of Technology, and Milliken University and the many small colleges in the State are taking care of students of college and university age, in the aggregate far in excess of the number provided for in the State University. And in my opinion they always will, and, further they always should.

In other words, while I am a firm believer in the principle of a state system of education from the lowest grade to the highest, I believe also thoroughly in utilizing, as far as possible, the assistance of all other agencies in the same department of education. And this coöperation will, in this country, for aught that we can see, for an indefinite period be not only desirable, but necessary to meet our educational needs.

It is the non-state institution then in England and in this country which has been in a certain sense the "Ark of the Covenant," which has carried on from generation to generation the precious deposit of learning and has been the intermediary by which the spiritual possessions of the past have been carried over and made the possessions of the present.

Endowed institutions, whether under private or church control, have thus done a vast service. But, on the other hand, they have the defects of their virtues. Educational institutions, whether private or state, are by nature conservative. They resist changes and improvements. They fight progress almost as by a law of their being, and the greater their endowments, the more completely they are removed from the necessity of appeal to the life of their own generation for support, the more set do they become in their conservatism, the more bulwarked in their opposition to all progress. They may by their wealth defy the currents of progress. They may oppose themselves to all forward movements. Not only may they do so, but in nearly every instance in history they have done so. The history of every European country demonstrates that these bodies, the universities and colleges, have had to be reformed by law. Left to themselves they have suffered dry rot in an extreme form. Oxford and Cambridge fought bitterly all attempts to force them into line with modern progress. It was the forcible subjection of the German university to the directing power of the government which broke up the crust of conservatism and paved the way for that wonderful

career of progress which put Germany at the head of scientific progress. Even in our own country our colleges and universities have the same opposition to education and progress to record. If the people in this country had handed over to college and university faculties the decision of the important educational questions which they have had to settle in the last fifty years, we should have today practically no high school system, or one of comparatively little value. We should have no system of state universities. We should have, to a large extent, no professional schools of high quality at all. It is, indeed, a question whether we should have even an efficient free common school system.

Fortunately for us, however, our institutions as a whole have been so poverty-stricken that they have been compelled to appeal to the community continually for funds, and in doing so they have been forced into lines of progress which have become more and more evident in the past few years. I am a great admirer of Harvard University, easily the greatest of our universities; I am a great admirer of Harvard professors, and especially of that great man, the present president, *facile princeps* among the leaders in American education of the last twenty-five years, Charles W. Eliot, but I do not believe there has ever been a time, down to within a very recent date, when if the faculties of Harvard College could have had absolutely their own way, and had had money enough to persist in their own way, they would not have committed themselves squarely against every question of educational progress which the scope of the times has brought to them. And what is true of Harvard is still truer of the less progressive institutions of higher learning, of which we have many.

So I believe it is necessary, friends, by the side of this system of private, endowed, church institutions, to maintain a system of state institutions. By the side of these other great institutions of learning it is necessary in this country to maintain the state university, which, because of its entirely different origin, because of the different influences to which it is subject, can work out a supplemental scheme of education in many different directions, extending into many fields which would be neglected in all probability by these other institutions. Such an institution, even though not a leader by choice, will by its very constitution be compelled to adjust itself to modern demands and thus force the other institutions which wish to exist by its side into a larger and more liberal view, and finally into what is clearly the line of progress.

The state university is necessary in order to help maintain the democracy of education; to help keep education progressive; and finally in order to keep higher education close to the people, and make it the expression and outgrowth of their needs.

As a state university, we may properly demand from this institution that it undertake certain functions which it is not so easy for other institutions to assume.

This institution as a state university may become more directly and immediately the external expression of the corporate longing of the people for higher things in the sphere of education than can any other type of institution. This is said with all due regard for and due recognition of the real way in which the private institution has entered into, and is a real expression of, the life of our people. Fortunately, we have never needed to fear, in this country, what some of the continental nations seem to have feared, namely, that institutions of learning under private or church auspices would work against the public interest of the community of which they are a part. The fundamental object of all institutions of higher learning may be summed up from one side, as the creation of the highest and most efficient type of citizen. And fortunate it is for us that we may truly say today, as in all previous periods of our national history, that all our higher institutions of learning, whether founded by private individuals or by religious sects, have in this respect worked out the same beneficent result for the community; that the graduates of all these schools alike have been to the same extent good citizens, have been devoted patriots, have been self-sacrificing and public-spirited members of society.

And yet I cannot help but think that an institution, in the establishment and endowment of which every citizen feels that he has a direct and immediate share, expresses in a certain way more fully his desire for higher things in the field of education than can any other type of institution.

As the citizens by their combined effort make it possible to raise the standard, enlarge the outlook and increase the equipment of such an institution, they are by this very act themselves widened in their own outlook, enlarged in their own sympathies, quickened in their own higher life. And as this institution is thus made more efficient, it again in turn reacts upon the quality of its clientele and its constituency by turning back into its midst an ever-swelling number of young people, who in their turn by their higher education and their more efficient training raise the level of the society from which the institution springs. And so there is a real moral influence, and a real moral power proceeding from this relationship between the state university and the citizen, which is none the less real, none the less effective because, like all spiritual things, it is impalpable, and, to a certain extent, elusive. And just as the creation of the public elementary school opened a new era in the consciousness of the American people as to its duties toward education, just as the creation of the public high school has opened a new outlook, established

a new consciousness on a higher plane of the duties of the community as a whole in the field of secondary education, so the creation of the state university has marked a new, a forward, an upward step of no mean importance and no mean power. It is a great step to get a whole people to recognize in its corporate capacity that one of its fundamental duties is higher education, and that one of its fundamental purposes should be the creation of organs of activity which should realize and carry out this fundamental function. It means that the whole people has passed on into a new and a higher state. It is no longer an appeal to a man as a Christian that he should look out for the education of the community of which he is a part, and to which he owes a duty—surely a high appeal—it is no longer an appeal to the Baptist or the Methodist or the Presbyterian that he owes it to the church and that the church owes it to itself to look out and provide for the existence of church institutions of higher education—surely a high appeal—nor is it merely an appeal to him as a philanthropist, striving as an individual to return to society some part of the wealth he has achieved; but it is a far more fundamental, a far more universal appeal to him in his capacity as a member of society, whether Catholic or Protestant, whether Baptist or Presbyterian, whether rich or poor, that this duty to assist higher education is as complete and all embracing and fundamental as any other duty of citizenship. There is no doubt that when a community reaches this point of view it has passed onward and upward into a new and a higher state of educational consciousness with an ever wider educational outlook, and with the promise of undreamed-of visions in the years to come.

It is a necessary part of the idea of a state university that it shall be an organic member of the state system of public education, and that while, therefore, in a certain sense it is the crown of this system, it must rest solidly and securely upon a sound basis of secondary and elementary training. No state university can become the most efficient instrumentality for educational work within its jurisdiction unless it is built up upon a sound system of elementary and secondary schools from the kindergarten to the university itself.

It follows from this that the university must itself be an active organ in developing, if necessary in creating, in refining, in elevating, the character of this elementary work; for without it the university cannot become a true university at all.

It follows, moreover, that the university must be most intimately and continuously associated with the scheme of elementary and secondary education. It must be so immediately based upon it that there shall be no gap between the university and this scheme of preparatory work.

From this, several consequences follow, some of them beneficial and some of them, if not injurious, at least antagonistic in a certain sense to the highest and most rapid development of the university.

The state university cannot require for admission what the secondary schools of the state cannot give, and if these remain few in number and of a low type, the university itself must be content with living upon a lower plane of usefulness than would otherwise be the case.

It is a natural outgrowth, therefore, of this essential fact that the state universities were the first of the higher institutions to get into close organic touch with the great element of the secondary system known as the public high school, and that they have worked beneficially upon this system of lower schools, sustaining, lifting and improving it.

It follows, also, from this that the state universities were the first to find it necessary to adapt their own requirements of admission, to adapt to some extent their own curriculum, to the needs of these secondary schools which have a much wider function than that of simply preparing for the university. And so the state university has been determined in its educational policy by the needs of the secondary school itself, thus bringing about a most intimate relation. The result of this intimate relation between the state university and the secondary schools has been that the university in all the states where it has been put upon the proper basis, has been the most active and energetic influence urging the community to develop in an adequate way the secondary school system.

The statement is sometimes made by opponents of large appropriations to the state university that you had better spend more money on your lower schools, and less on your higher, if you desire to improve the educational quality of the public school system. No graver mistake could be made than that which is involved in the ordinary understanding of this proposition.

You cannot have good kindergartens unless you have good primary schools. You cannot have good primary schools unless you have good intermediate schools. You cannot have good intermediate schools unless you have good high schools. You cannot have good high schools unless you have good universities. In other words, no community reaches the upper grade of efficiency in its elementary schools, except by establishing and improving the quality of its higher schools. This is so apparent to a student of education, and seemingly so difficult of comprehension by the general public, that a further word may not be out of place.

Suppose a state had ten millions of dollars to spend on its school system. My proposition is that a considerable portion of that should be spent upon the highest grade of the system, the university, in order to secure the effective expenditure of the money in the lower grades, and that if you were to spend ten millions of dollars upon your primary schools and nothing upon your higher schools, you would have a far inferior system of schools to what you would have if you provided for an adequate scheme of higher institutions.

Certainly you cannot have good schools unless you have good teachers, and all our experience shows that you cannot have good teachers in any grade of schools unless you have good schools of a higher grade where these teachers may secure their preparation. Moreover, there is a subtle moral force ever at work in school matters which makes it impossible to secure the highest point of efficiency in any grade of the school system unless it looks forward to and prepares for something higher. You cannot have good schools of an elementary grade unless there is the opportunity for your best pupils, for those who have the time and money, to pass on up to ever higher grades of study. This is the justification of the high school, the college and the university from the standpoint of the eighth and seventh and sixth and first grades of the elementary school.

As a state university this institution will have intimate relations not merely with the high schools and elementary schools of the educational system, but with the other great element of the secondary scheme, namely, the normal schools.

Many people have thought that the normal school is in a certain way merely a temporary element in our educational system. It is intended to train teachers for the elementary and secondary schools. And there is a feeling in many quarters that as our high schools improve in quality and our universities multiply, the necessity of our normal schools will disappear.

I have no doubt myself that the normal school will change profoundly its character in the course of years, though how it will change I do not profess to know; but that it will, within any time for which it is worth our while to plan, become a superfluous element in our scheme of education I do not believe at all. Develop our universities as much as we may be able, develop our colleges as much as private enterprise and church initiative may assist us in doing, we shall still not be able to secure for our elementary and secondary schools an adequate number of properly trained men and women without the assistance of these normal schools.

I believe that they should stand in the very closest relation to the state university, and I believe that it should be possible to organize their work in such a way that persons who intend to prepare for the work of teacher in the elementary and secondary schools of the state, and for the position of superintendent and other similar administrative positions, should find it possible to pass either through the normal school and then through the university, or through the university and then through the normal school, as they may find it most convenient. I believe that all our universities would find it to their advantage to get into touch with this great normal school system, but for the state university this is an absolute essential.

The State of Illinois has established five great normal schools and

has equipped them in a most liberal way, and will continue with increasing liberality to keep them fully abreast of the times. They are doing a work which no other element in our school system is doing, and I expect, for my part, to see them improve and grow rather than decrease, and the State University and the normal school together will form, if you please, a single institution for furnishing, in the most efficient and economic method practicable, properly trained men and women for the great system of public schools supported by the State.

But the state university, it seems to me, must proceed further than I have thus far indicated, and with one or two brief suggestions as to some of the directions in which the state university will develop, I shall bring these considerations to a close.

The state university will become more and more a great civil service academy, preparing the young men and women of the state for the civil service of the state, the county, the municipality and the township, exactly as the military and naval academies are preparing young men for the military service of the government.

The business of the government is becoming more and more complex with every passing year. The American people are beginning to take a new attitude upon the subject of its civil service. Formerly it was thought that anybody who could read and write was fit for almost any position in the service of the state, and for a long time in the history of the country it was thought that the most practical method of selecting men and women for positions in the civil service was by their affiliation with and devotion to political parties or political factions. We are coming to a recognition of a new state. The abuses of politics have led the American people to the general acceptance of a principle, very far from being worked out as yet, under which men and women shall be selected for the civil service by a method which shall eliminate the element of political affiliation (I am speaking now of the administrative positions in the narrowest sense of that term), and every passing year sees some new strengthening of this principle of the so-called merit system under which people are selected for posts in the public service on other grounds than that of party devotion.

But we shall not be satisfied very long with this condition of things. Public administration is becoming with every passing year a more complex subject. It calls for special knowledge. It calls for the trained hand and the trained mind. It will not be long, therefore, until the American people will, for many positions now practically open, insist that the holder shall be properly trained and qualified to perform the duties of that particular office; and now that the state offers every opportunity to secure an education not merely in the elements of learning, but in the secondary and higher grades as well; now that the state offers an opportunity to procure practically free

the technical training necessary to qualify people for these posts, we may expect to see more and more a standard of efficiency set up and insisted upon by the people of this State, for all persons entering the public service. In an age of excellent courses in civil engineering supported by the state almost free of charge, we may expect to see the state require that the civil service aspirant in the field of surveying, for example, shall be a man of scientific training, not merely one who has learned his business by the mere rule of thumb. We shall expect to see every municipality demand and employ men of careful scientific training to test its water supply and its food supply. In other words, the time of the haphazard, happy-go-lucky, hit-or-miss public official and of the ignoramus in the department of public administration is passing away in favor of the scientifically trained man who knows his business. Now the people of this State have a right to demand of the State University that it shall turn out men and women properly equipped for this kind of work, and who will return to the State in efficient service a thousandfold over the cost of their training.

Now, all this you will note is in addition to and quite apart from the function of the state university as a center for the training of men and women who wish to enter the learned professions, a topic which has been discussed previously. To my mind, if the state requires an examination of proficiency from anybody as a condition of practicing any profession, it should itself provide the centers properly equipped, where the requisite training may be obtained. And as the state may undoubtedly increase this supervision over callings now left free, we may expect to see the state, in the state university, provide opportunities for study in many directions which are not now to be found at all.

But the state university must be and become more than a civil service academy. It is and is destined to become to an ever-increasing extent the scientific arm of the state government, just as the governor and his assistant officers are the executive arm and the judges and the courts are the judicial arm.

As the business of government becomes more complex, the problems which the state has to solve in many different directions become more difficult, requiring in many cases more careful scientific experimentation and long-continued investigation, for the pursuit of which there must be adequate laboratory equipment and trained investigators. For all such work the state university is the natural and simple means already provided.

I have called attention to the fact that here in the University of Illinois are already located, for example, the State Water Survey, the State Natural History Survey, the State Entomologist's office, the State Geological Survey, etc. There is no doubt that if the university is properly organized to undertake this scientific work in a

way to make it thoroughly effective, it will, to an increasing extent, be constituted the scientific arm and scientific head, if you please, of the state administration.

It goes without the saying that this concentration of the scientific work of the state government at the university has most valuable educational results. The increasing number of scientific men centered at the universities helps create that scientific atmosphere, that scientific spirit which is absolutely essential to the upbuilding of a great university. This union of scientific investigation and educational work is a most fortunate combination for both sides of the enterprise. The scientific work for the state government offers an opportunity to train the young men in actual practice, and by thus securing their interest in and training for such work the government is able to obtain an ample and regular supply of properly trained workers in this field. By such a union the state secures the maximum of service at a minimum of cost.

Further, the state university will, I believe, in combination with the normal schools become practically, for many concrete purposes, the state department of education. We have already in this State and in most of the American states a state department of education, consisting usually of an officer called the state superintendent of public instruction. His duties, however, are comparatively narrow, as prescribed by law. The possibility of performing them is determined by very meager appropriations. Usually speaking, it is an office entrusted with the enforcement of the school laws and the distribution of the school money. The functions of the public ministry of education such as one finds in so many of the European states either are entrusted to him in a very small degree, or he is enabled to carry out these functions only within very narrow limits. The duty of canvassing the educational needs of the state from time to time, urging and impressing them in a strong way upon the people of the state, not merely upon the teachers and the legislatures and the government, but upon the great masses of the people—this is something which our American departments of education have done only to a very slight extent. Now and then a strong personality in the position of state superintendent has worked out great things for the education of the state. We have an example of such a personality in the superintendent's office of the State at present. But there is need of a more continuous, of a wider spread, of a more deeply rooted, activity in this direction, than the state superintendent's office under existing conditions can develop. Such a function, within certain limits, I believe the state university combined with the normal schools can perform. The department of education in the state university organizing the resources of the state university for this particular purpose may bring to bear upon the educational problems and upon the educational

needs of the state, an expert opinion which it is not possible to find in any other department of the state administration.

This function, it may be said, is not performed by the university in its capacity as a civil service academy, preparing teachers for the educational service of the state. It is larger and wider than this. It is a recognition of the university as one of the organs created by the state for determining, within certain limits, the policy of the state in the great field of education.

And thus I might proceed with a summary of other great things that are waiting for the state university if it only knows the day of its visitation; if it only measures itself up to its opportunities; if it only performs faithfully and simply the duties which the state thrusts upon it.

But time presses and I must draw these considerations to a close. I have left untouched many things which you may have expected me to discuss, not because I do not consider them as important, but either because I regard them so fundamental that we should all agree upon them or because the limitation of time does not permit even of their mention. You will have gathered from what I have said my conception in general of the function and future of the state university.

It may be defined in brief as supplementary to the great system of higher education which private beneficence and church activity have reared, and it is to be hoped will continue to rear. It is corrective rather than directive; it is coöperative rather than monopolistic; it is adapted for leadership in certain departments, but must look to the non-state institution for leadership in others. It should be as universal as the American democracy—as broad, as liberal, as sympathetic, as comprehensive—ready to take up into itself all the educational forces of the state, giving recognition for good work wherever done, and unifying, tying together all the multiform strands of educational activity into one great cable whose future strength no man may measure.

THURSDAY, OCTOBER 19
THE ASSEMBLY OF THE COLLEGE OF ENGINEERING

THE CHAPEL, 9:00 A.M.
THE STUDENT-ENGINEER

W. F. M. Goss, M.S.

Dean of the College of Engineering, Purdue University

In the forty-nine Land Grant colleges of this country, of which the University of Illinois is one, there are today approximately ten thousand students in engineering courses. These students are in most cases mature men. They have come to their present work as the result of careful selection after long courses of preliminary training, and they look out upon their life-work with high aspirations. The student-engineer is in fact a force making for American citizenship, the full significance of which few people yet understand. He is permitted privileges such as the world has never before set before her young men, and it goes without saying that these privileges carry with them responsibilities which are unusual. The character of some of these it is my purpose briefly to discuss.

First of all, the thinking student will not fail to consider the value and extent of the college influence. The varied and dignified exercises of the present week in which you as students of the University of Illinois have had a part, give emphasis to this theme. Here are ample grounds, fine buildings, extensive laboratories and complete equipments—apparatus which in some cases has the delicacy required in the researches of the scientist, and in others the massive proportions necessary in the machinery of the engineer. Here, also, is a staff of distinguished doctors and professors, aided by numerous instructors and assistants all working in an effective organization for the accomplishment of definite results,—men who have come to their present positions after special training, and some of whom have through years of arduous service so well guided the destinies of this institution as to make possible its effective methods and its present high standards. Here, too, are students coming from every part of a great state, from other states, and even from foreign lands; from city and town; from the home of the farmer, the artisan, the merchant and the lawyer, here to live and work as one people, to be animated by a common purpose, each one to give and to receive something from his contact with every other one.

Such a description, embracing the grounds, buildings and equipment, the professors and the students, is often regarded as constituting a description of the University. It represents the materials and persons which appeal to the ordinary visitor. But such a conception

is elementary. It is but a starting point from which properly to apprehend the significance of such an institution. That which lies immediately about us is in fact but a center toward which tend a multitude of interests and activities. Beyond this campus are the people of the State, who, acting through their Legislature, supply with a liberal hand that which is needed for its maintenance and prosperity. The University of Illinois is great because the people are its keepers, and if the people are its keepers, then every tax-payer may claim to be a part of it. Then there are the homes which are represented by its students, out of hundreds of which today come thoughts of love and interest, of hope and expectation. The father and mother of every one of its students have a vital interest in everything that affects its welfare, and the sympathies of the University must be broad enough to include them.

Again, outside of grounds, in every part of the State, are its manufacturers who are required constantly to be increasing the efficiency of their methods; to proceed by processes which are new; to substitute a higher degree of intelligence in operation, for that which served before. The steel maker, the tile maker, the cement manufacturer, the engine builder, the power plant manager, all look to the college for help. They require men, and the college supplies them; they desire to be informed concerning a scientific fact or application, and they turn to the college and are instructed. The industries of the State and the technical school of the State are in fact but two different parts of the same thing. Each contributes its strength to that of the other, and the college is as large as the industrial activities of the State can make it. These are some of the interests which, having their origin remote from this vicinity, find their center here. They are converging interests, but there are others which diverge. Year by year men trained within these halls scatter to become a part of the bone, sinew and of the intellectual force of the State, establishing homes and building industries. Wherever they go, if they are true to their training, they make things better and prepare a way in which you who are now students may hereafter follow. Certainly, no proper estimate of what constitutes the University is complete which does not include its graduates.

These brief statements but feebly measure the extent of the university interest. The student-engineer finds not only buildings, laboratories and professors awaiting his coming, but he discovers that the support of a great state is behind him, that great interests center in matters with which he is privileged to concern himself, and that hundreds of graduates who, while busy with their own affairs, look back with serious concern to the record which he is making, stand ready to give him a helping hand when he is prepared to receive it.

Turning now from the university to the student-engineer, it is well to remember that the conceptions which one has of his future career are likely to be limited by his past experiences. A boy who thinks of the thing he will do when he becomes a man usually entertains visions which please a boy. There is in fact, nothing in a boy's experience which can serve as a background upon which he can depict the pleasure and the dignity which the opportunities of manhood are to bring him. A New England dame, having passed sixty odd years of pastoral life in a village behind the hills having a stage-coach communication with the outside world, upon hearing by chance some discussion of a project to extend a railway in the direction of her home, quietly remarked that "the cars might come but she should not go out to let the bars down for them." Your observation has, of course, long since taught you that railway trains progress over the country whether the bars are let down or not, but I assume that you are still reaching out toward ideals which your present knowledge and experience but imperfectly sustain. In view of this fact, I cannot do better than to call your attention to some of those qualities and exercises which assist in the development of the student-engineer.

In one's reaching out toward a future goal, he should place a high value upon the dignity of his calling. It is hardly worth while for this institution to lavish its resources upon you or for you as students to subject yourselves to the discipline of a four years' course unless something more than ordinary is to come out of it. Your career as a student is in itself a call to leadership. Whether you achieve leadership or not may be a question, but there should be no mistake concerning your ideals. Such a conception raises the work of the student to a high level. It places beneath his feet everything which is low and mean and even commonplace, for a man selected for leadership necessarily carries the responsibilities of that leadership, and many things which trouble and take the time of men about him give him no concern, for he lives above them. There is nothing egotistical in the acceptance of such an ideal. It is hardly more than a rational business proposition. It is a declaration to the effect that those who enjoy exceptional training must be expected to become exceptional men.

A student who feels the responsibilities of such a call will guard well the disposition of his time. In this day of the newspaper, we hear much of the frivolities of college students, and while it is true that every large college probably counts among its members some who are careless or indifferent to their obligations, a few who are dissipated, and a still smaller number who may be positively vicious, these things are not characteristic of an American college community. But while we may thus comfort ourselves with the feeling that we are not entitled to much of the criticism that is sometimes laid at our door, we do not, by so doing, set matters right. It is not sufficient that the

college student be better than he is sometimes thought to be; the important question is as to whether the process of the college tends to the upbuilding of his character. The fact is that the student who does not feel that he is progressing in his ideals of simple truth and honesty is on dangerous ground. These are matters, moreover, which he should gauge, not by his ability to keep the law, but by the strength of right impulses which animate him. He should insist upon living in an atmosphere of pure speech, and suppress all practices which result in a waste of time. A disregard of such reasonable requirements is equivalent to a neglect of opportunities or worse, and a student whose attainments are so limited that he does not desire them, is out of place in a college community. In all this, you will notice that I have not set my standard high. There are other and higher grounds of appeal from which I do not at this time assume to speak. I merely urge upon you the fact that a successful professional career cannot be enjoyed except it is sustained by abiding qualities of manhood.

The student-engineer must of necessity be much absorbed in the technique of his course. Upon first acquaintance, a great bridge is but a bridge to him, but as he pursues his study the bridge resolves itself into foundations, abutments, piers and superstructure, and each of these in turn becomes separated into scores of details, and beyond the details he knows there are methods of analyses, as refined as he may choose to have them, by means of which the size and proportions of every part have been determined. When he understands the methods employed in its building, the bridge becomes a series of logical facts the contemplation of which stirs his ambition and stimulates his interest in principles of design.

In a similar manner the unskilled gaze unmoved where the roar of a waterfall is converted into light, but as the student-engineer proceeds with his study of such an installation, he sees the stored energy of impounded water, wheels for utilizing it, electric generators and rotary converters for making and sending forth the current, and transmission lines leading out to a distant network of service wires tipped with lights which glow like the stars of the firmament. As he proceeds with his examination, he finds that in each one of these elements there is a labyrinth of detail and that every detail is a response, more or less perfect, to the laws with which it is his purpose to become familiar. In a similar way, engineering structures and machines of many sorts must be studied, their functions analyzed, and the theories which have been formulated to guide practice in their construction or operation, studied. The student rarely fails to be attentive to these studies, for he realizes that his whole purpose in attending a technical school is that he may become proficient in them. He is interested in them. He is conscious of the uplift which they give; they serve to increase his knowledge of facts; they promise a

larger degree of intellectual freedom, and he feels that by their use he must sometime prove his value. It rarely happens, therefore, that the student fails to do justice to his technical work, but he makes a mistake when, having done this, be it ever so perfectly, he assumes that he has met the full measure of his responsibilities.

Students who are inclined to shut themselves up with the routine of their course should consider that no man can be an engineer in a large sense who knows only engineering. If in his struggle for attainment he stops with his technical training, he is in danger of becoming merely an animated calculating machine, useful and valued as are the slide-rules and mathematical tables, but shut out from all chance of preferment because of the limitations with which he has unconsciously hedged himself about. Such a one is on the wrong track. The engineer is a man; the technical training but one of his tools. A safe and reliable engineer is an honest and conscientious man. An able engineer is a well-trained, far-seeing man, and a great engineer is a man who, possessing all of these qualities in an unusual degree, has achieved success through his work. The student, if he would avoid professional suicide, must regard with care all things which make for a well-rounded manhood.

The schools of engineering offer many things for his upbuilding in addition to the technical work of his course to which he may well give earnest attention. For example, there are the general studies of his course, the literature, history and modern language upon which the student often enters with some reluctance. He sometimes gives expression to a feeling that such general studies are not in line with his ambition; that their trend is away from his purpose, and that in the nature of the case they cannot greatly interest him. Some candidates for engineering honors have been known to drop their college course upon their failure to secure permission to specialize, or, in other words, to go around these general studies. All such objection arises from misinformation and from an imperfect understanding of what it is to be an engineer, and if persisted in will strangle the very qualities of character which the college course is designed to stimulate. None will deny that a full-rounded man should be able to spell, to write a fair hand, to properly capitalize and punctuate his manuscript, for these are rather commonplace accomplishments and certainly should be possessed by one who aspires to leadership in any field. Some knowledge of books, of historic events, and of a language other than his own, constitute information which, in view of the attainments of those with whom the future leaders will need to deal, are hardly less elementary. The student who will fairly and soberly compare the opportunities for instruction in these kindred lines which are offered by schools of engineering, with the need which manifests itself when he compares his own attainments with

those of his ideal engineer, will find new interest in the general subjects of his course.

During his college life, the student-engineer should endeavor in every possible way to increase his familiarity with technical literature. He should find some time for the technical periodicals, and more for the books of the library. He should gain some acquaintance with the proceedings of the national engineering societies, and still later he may interest himself in books devoted to specific subjects. In this matter, he will avoid the humiliation which sooner or later comes to one who, having graduated from a technical school, finds his acquaintance with technical literature limited to the few texts which on the day of his graduation, he carried away from his college under one arm.

There arise, also, in the college and perhaps in the town, many occasions when lectures, sermons or music may be heard. It is an unfortunate fact that those students who, through lack of advantages in youth, are most in need of broadening influences, are generally the last to appear on such occasions. Moreover, it must be confessed that the average student does not as a rule place a high value upon such opportunities. The college authorities exert themselves, the intellectual table is spread, the guests are bidden, but they for whom the feast is especially prepared do not come. The failure of the student to avail himself of such an opportunity, is in most cases due to a lack of interest. He finds himself busy with other things and so does not come. In some cases doubtless the failure is the outgrowth of timidity, of a feeling that that which is especially refined is a little out of his class, that it would best be deferred until he can more nearly measure up to the requirements. Obviously, such reasoning is trivial. The student is enlisted as a leader and leadership permits no hesitation in the advance. Any good or proper thing to which he is clearly entitled should not be lightly put aside. He may not get as much from the lecture or sermon as his neighbor who has been better trained; he may not be inspired by music, nor especially enjoy his early appearances in society, but he should be wise enough to recognize that all of these things which people of culture enjoy and find profitable, are worthy of his attention and effort.

The importance of these matters is emphasized the moment one attempts to construct a picture of his ideal engineer. For example, when Captain Eads, from his knowledge of the habits of rivers, conceived the plan by which the channel of the Mississippi might be deepened, he saw all features of the construction just as they were afterwards developed in actual materials. Here moved the water of a mighty river in a shallow current spread out over a wide course. There was needed to meet the requirements of commerce a channel of considerable depth. The vision of the engineer made clear the fact that the water if confined to a narrow course must work its way

deeper into the sandy bottom. All along the bank grew willows in abundance. The engineer saw the willow branches cut, woven into great mattresses, and then loaded with stones and sunk, one after another along the course of the stream, layer upon layer, until willow twigs and stems, intermixed with sand deposited by the water extended from the bottom of the stream to the surface, forming a supplemental bank between which the contracted stream moved rapidly, cutting its way downward and giving the desired channel. The plan is not complicated and the completed work seems simple enough. But without the inspiring genius of the engineer, the Mississippi might today be rolling its slow, shallow and wide-reaching way.

The qualities which necessarily enter into our picture of the ideal engineer are in fact the elements of greatness. They are the outgrowth of natures which are large and sympathetic, and no one can possess them who confines his views and his interests to the narrow limits of his own personal affairs.

In thus urging upon you, the students of engineering of the University of Illinois, the importance of a well-rounded development, I proclaim no new doctrine, nor am I likely to find any who will disagree with me in the general propositions which have been set forth. But it will be said that the problem defined is practical rather than theoretical. In the minds of many students it at once resolves itself into a question of time. In such an institution as this, the pressure of technical work is necessarily heavy, and the student who would do other things, has need to study well the methods by which he proceeds. As the professional engineer brings the working of a machine to its highest performance by the careful adjustment of each of its parts, so the student-engineer must by proving his methods and by the omission of all trifles, find time in which to give attention to these necessary matters.

Finally, the wise student will never permit his routine to become a burden. The work must not be a taskmaster; he must be the master, for there can be no interest, no enthusiasm without mastery, and it is these, the interest and the enthusiasm, which must be depended upon to transform tasks which are difficult into opportunities to be enjoyed.

ASSEMBLY OF THE COLLEGE OF SCIENCE
PHYSICS LECTURE ROOM, 9:00 A.M.

THE SCIENTIFIC AND THE NON-SCIENTIFIC

THOMAS C. CHAMBERLIN, PH.D., LL.D.
Professor in the University of Chicago

This is to be a sermon; and my text is this: *Let everyone stand on his own feet, and let everyone keep his feet on the ground.* This text is not canonical and its verse and chapter cannot be cited, but it may be found embodied in every ideal contribution to true scientific education. Two fundamental canons control educational endeavor in the scientific field, independence in the worker, and reality in the subject-matter. To teach the student to think for himself, to develop in him the power of independent inquiry, whether it be original investigation, or the more common inquiries of life, is the ideal of the modern science teacher. To prepare youth to be intellectual freemen, in contradistinction to mere followers or servile imitators, is the mission of scientific education. Authority indeed plays an appropriate part in scientific work, but chiefly as an authentication of determined facts, and only guardedly in the promotion of opinions and doctrines. A survey of the past reveals the significant fact that the influence of authority was most dominant in those stages of intellectual development when the grounds for safe conclusions were feeblest. A survey of the present reveals the fact that authority is still appealed to most where good reasons and sound evidence are most lacking. One need not go farther afield for an illustration than the pages he reads whose forms are taught on authority because they cannot well be taught through reason. It is not too much to affirm that the decadence of authority and the rise of appeal to individual and independent reason have been directly proportionate to the amount of good evidence that could be commanded. True scientific education is leading on felicitously to individual and independent intellectual action, because science has an adequate body of irrefragable evidence to offer, and having such evidence can most freely leave everyone to draw his own conclusions. Under the wholesome influence of scientific education, the rising generation is coming to fulfil more and more effectually the first admonition of our text: *Let everyone stand on his own feet.* The preacher need only exhort to a continuance in well-doing.

The burden of our sermon rests on the second part of the text: *Let everyone keep his feet on the ground.* I would not have you put too literal and too narrow an interpretation on this injunction. It is not intended to mean that a man must always stand with both heels on the solid rock of demonstrated facts. That is too conservative,

and would prevent his getting on. It is lawful for a man to stride after truth, to tiptoe for it, and even to leap after it. If he can keep his balance well, and light safely on his feet, it is permissible to leap high and far. It is lawful to take as long philosophical or speculative flights as one may be able to sustain, provided he starts from the ground and returns to it without disaster. The admonition is not that we should limit our studies wholly to the demonstrated conclusions that form strict science, as distinguished from tentative endeavors to attain science, but that we should keep in touch with realities in our efforts to find truth. In our use of the term scientific, in this preaching, we include not only strict science but all properly ordered stages and processes of thought that lead toward science, even though merely provisional and temporary, if controlled by scientific canons. It includes scientific philosophy and scientific speculation when these start from scientific facts and properly strive to end in scientific demonstrations. The admonition is not intended to limit the range of processes so much as their character. We have need of every possible resource that helps on toward real science. We wish only to exclude from the scientific category those methods which do not conform to the canons of scientific endeavor, those that are not helpful to scientific results, those that are liable to create confusion as to what is scientific and those that are sure to involve wastage of talent and effort. We shall be more free to use hypotheses and speculations controlled by the canons of scientific procedure, if they are not confounded with hypotheses and speculations that ignore such canons and cast the shadow of their untrustworthiness over the whole field of hypothesis and speculation. There are hypotheses and speculations that as scrupulously scrutinize the grounds on which they are built as does science itself. These are ever and always mindful of their hypothetical bases and of the scantiness of solid substance on which they are built. They are ever mindful of the insecurities of the heights to which they are reaching, and of the accumulating peril of that insecurity as the extension proceeds.

These stand in sharp contrast to hypotheses and speculations which are negligent of the ground on which they are built. They stand in especial contrast to those which confessedly assume that, regardless of a foundation in embodied reality, the building of the mental structure may go on indefinitely by virtue of its own logical relations, and may even become a substantial system of truth, whether the ground-proposition be a fact or a fancy. These we would have labeled by some other term than scientific, since their methods are at variance with those that have been found indispensable in the production of science in the fields where tangible demonstrations most effectually discriminate between that which is true and that which is not. Such hypotheses overlook the fact that every logical step only

extends the weakness of the fundamental postulate and that the more rigorously consistent the successive steps are, the more certainly do they retain the error of the primary assumption. These are cases in which a logical slip affords some little opportunity for the fundamental error to slip out.

Science has acquired title to its name and has earned the equity of its usage and good will by long continued labors and sacrifices of a distinctive kind. The canons of method and of ethics that have controlled these labors and sacrifices have given a distinctive character to the products commonly known as science, and these have acquired value because they have approved themselves in experience. Similar value, so far as we know, can only be produced by similar processes. It is therefore not only right but important to us and to mankind that the title thus earned should be applied exclusively to the processes and products that have given it value. It is not at all a matter of etymology or of sometime usage; it is a matter of rights and values earned by labor. Nor it is at all a matter of subject, within the range of embodied realities, whether the subject be mental or physical. Nor does it necessarily involve the presumption that the non-scientific is without value, even eminent value. It merely involves the assumption that each belongs to its own category, is entitled to its own name derived from its distinctive modes and processes, and that the product of the distinctive labors of each should be its own possession. The essential canons of scientific procedure are:

(1) Certain assumptions are necessarily made at the outset, as the basis of scientific procedure. They are usually quite unconscious because they are so pervasive and organic that they have become essentially instinctive. They deserve to be brought into sharper recognition. They are not different from the universal assumptions of all sane people in the common affairs of life. They appear to be ancestral inheritances, and this is doubtless why they have so nearly lapsed into unconsciousness. They are an essential element in what we call common sense; indeed I think some one has said that science is only a specially selected and carefully assorted variety of sanctified common sense. But in the course of their ratiocinations men often come about to propositions not in harmony with these and fail to note the incongruity because the basal assumptions are so nearly unconscious. Scientific inquiry, though eminently skeptical in its methods, proceeds on the assumption that the system in which we live is genuine, honest and real. It assumes that there really is, as our senses lead to us believe, a physical world and a mental world; that the mental world takes genuine cognizance of the physical world and of itself, and that such cognizance, when duly tested and rectified, constitutes the basis of science. It is assumed that the mental world possesses not only the power of true cognizance but the power of self-

directed search for truth, and as a necessary means to this, has the power to choose between alternatives, to control conditions, to invent methods, to put its impressions to the test, and to discriminate between what is true and what is false. That which is in accord with rectified experience is accepted as the material of science. Such accord is indeed the best definition of science. These sound like platitudes, as indeed they are to us, but not a little that claims a place under the broad mantle of the term scientific is negligent of these basal assumptions. It is well therefore to remind ourselves that as the very basis of research, we assume a genuine volition with a working degree of freedom, not a mere sophistical succession of highest-motive sequences; a genuine intelligence with powers of discrimination between truth and error, not a mere predetermined succession of compulsory impressions, and a genuine world of real existences, not a mere complexity of subjective illusions. I am not speaking here the ultimate truth about these matters, but simply what seems to me the assumptions actually made. Our belief in the honesty of the system of which we find ourselves members compasses the genuineness of our strongest organic impressions on both the mental and the physical side. In the normal state, we recognize no organic illusiveness, nor any Mephistophelian deceptiveness. We plant our feet squarely on the postulate that the system of the world is essentially what it purports to be. It is admitted erroneous impressions may be gained both in respect to the mental and the physical, and these constitute the antitheses of science, and are made the subjects of the closest watch, but they are held to be incidental, and not organic or fundamental. They grow most largely out of the fact that our organism is incapable of receiving impressions from more than a minute fraction of the activities by which it is surrounded, and hence it has become adjusted to a select portion of possible impressions which chiefly include those most needed in common life; the susceptibility to those even is incomplete. It is difficult to see how it could well be otherwise. An organism that should do no more than take accurate cognizance of all the physical motions by which we are surrounded, from the complicated revolutions of the sidereal system down to the immeasurably intense sub-atomic vibrations, would need powers of receptivity and endurance quite beyond our comprehension. We are limited to what we can stand. But when we shall have need to go below and beyond the selected range of impressions suited to everyday life, a multitude of mental shortcomings are inevitably disclosed. With the evolution of our organism we are endeavoring to extend our powers and to penetrate beyond the limited range of insight of our cruder life. There are indeed, incidentally, some real illusions, if the mind is not alert and skilful, and there are individual insanities. But all these, we assume, arise from limitations simply, not from insincerities in nature, nor from

insanities in the normal mind, much less from Mephistophelian snares systematically organized for our deception.

These assumptions do not by any means carry the conclusion that the partial vision of things that we now have, is the ulterior one, or that it gives the deeper interpretation of things. My belief in the genuineness of a stone as a hard solid passive body, does not preclude my belief that it is composed of myriads of electrons moving at incredible speed, and that it is a very miracle of internal activity. It is true that the refined intra-physical interpretation is almost infinitely different from the common superficial impression, but the two are not at real variance. To the mason, the petrologist and the physicist, three different impressions of a rock arise, each true enough in its kind, and all essentially consistent with one another. So in general. What the ulterior interpretation of the mental and the physical world is to be, and what their relations to one another may be, is yet to be worked out, like the deeper interpretations of all other subjects of inquiry, but if the solution is to be what we now regard as scientific, the inquiry must be based on the working assumptions of existing science and must follow its canons in all its procedure. If the solution is to be found in some philosophy whose assumptions and methods are not those of existing science, it should be accredited to such philosophy and not to science. If it is to be found in some poetic or spiritual inspiration quite apart from science or philosophy, it is to be accredited to such inspiration and not to science or philosophy. To the laborer belong the fruits of his labor.

(2) Working upon these basal assumptions of the rectified common sense of mankind, the devotees of the scientific method have built up, by the most careful and persistent observation and experimentation and by the most scrupulous scrutiny of all deductive and inductive processes at every stage, traversed by a most insistent testing of each step from every point of view, that body of conclusions which we call science. This has its most substantial nucleus in the tangible subjects represented in this assembly, as is properly recognized in the classification of this occasion; but it is by no means confined to these subjects. Science is not a function of subjects, but rather the distinctive product of a special and laborious method. The distinctive title, "the sciences," has come to be applied more particularly to the group of subjects here represented chiefly because the workers in these have been more rigorously loyal to the distinctive assumptions and methods of science and have thereby brought forth a product of exceptional firmness and solidity. The same method carried out with the same loyalty and assiduity should give to the sciences of the mental world a like solidity and a like true title to the name of science.

(3) But if the scientifically-sifted products of labor on all serious subjects are to be classed as science, the unsifted matter and the mat-

ter which will not bear sifting in all these subjects is neither to be called science nor scientific. Even if we generously allow that all serious effort to reach determinate truth by canons of scientific procedure may be called scientific though yet far from being science, there is still much that lies quite outside even these broad limits. There is scattered about each of our work-shops no small amount of litter of nondescript stuff that ought to be swept up and winnowed out, and the good metal put into the melting pot and the rest put into the fire, or thrown on the dump. We have all inherited a miscellaneous assortment of presumptions and prejudices that ought to be put through the renovator periodically and the decayed portions eliminated. Even our more substantial acquisitions need occasional overhaulings, and even reconstructions, attended by no small sweepings-out of accumulated debris.

Besides all this there is a whole department of our creative work that needs some other label than scientific. The department appears to be larger in the non-physical than in the physical fields, but it is essentially alike in both. Its basal feature is assumption in negligence of fact. Its best expression is found in declared romance in the field of the humanities; its most subtle if not its most beguiling expression is found in ratiocination on a fictitious basis. Your preacher lays no anathema on this department. On the contrary, he sympathizes with recreation by romance. The fictitious may well play its game while reality takes a rest. The fantasy may well relieve the strain on the scientific imagination at due times and seasons. Your preacher's plea is merely for accurate labeling and correct evaluation. We all, I suppose, indulge in ideal constructions with scant regard to the realities. We build intellectual castles in the air of rare architectural beauty, but with very limited specific gravity. A hint grows into a marvellous discovery. We dream dreams no mortal dreamed before. There is a romantic annex to all the sciences. But to be quite satisfactory the fictitious must simulate the real. The fantasy must imitate the scientific imagination. A bare result, however rich or wonderful, is insufficient. It must have a logical ancestry. Our creations must be the embodiment of logical relations. Our novels must seem to be true to our life. They must be scientific. Aye, there we go. Thus easily we slip the sheet-anchor of science, embodied reality, and glide away unconsciously on a mere gust of ghostly relations between things imaginary, and call it scientific. I suppose we all do it. I confess to have planted in every grand division of the globe more wonderful mines than were ever found in Africa or Alaska, and much more ostentatiously logical in their internal relations. I find it crude entertainment to imagine the discovery of a forty-foot vein, three miles long, carrying twenty-three thousand dollars per ton, and to revel in the sequential wealth. Logical antecedents and

a consistent environment must be supplied to form an artistic romance. My own finest effort in this line started in a real dream which found me in London where two explorers, with many flattering allusions to scientific availability, told me of certain signs they had seen on the Saharan coast of West Africa, and proposed a joint investigation. The real dream glided easily into a wakeful romance, and an ore deposit of the Keweenawan type, with gold substituted for copper, grew facilely and logically out of the antecedents which the imagination easily postulated, with all the requisite deformations, vadose and thermal circulations, selective solutions, complex reactions, concentrative precipitations, under mass action, with segregations, primary and secondary, lateral, ascending and descending, supplemented by meteoric denudation, giving felicitous physiographic reliefs, in short the whole complex of antecedents and consequents and logical interrelations necessary for an ideal, if not a super-ideal, ore deposit. Foreseeing the necessary consequences of such appropriate antecedents before they were actually discovered by my partners, with perfect human consistency, I diplomatically bought them out and became sole possessor. In the actual working of the mine, the logical difficulties of the situation developed consistently, bringing on skirmishes with the marauding natives and trouble with the Bey of Morocco. In negotiating my vast output the logic of nativity and blood led me to favor America and England, and this raised a rumpus with the Kaiser. But through all vicissitudes of good and ill the logical interrelations were religiously preserved. I dare not say they were as rigorous as those which my mathematical friends assure me characterize the non-Euclidian geometry, but at least I did not strain the possibilities in my primary postulate and in the outcome every one of my triangles bore internally the equivalents of precisely two right angles.

But in sober classification I would not call even this best of my creations scientific. It lacks the one essential of substantial reality. I am just as poor a man as I was before. If scientific in any sense of the term, it must be in that employed in the "sciences of the ideal." In a recent most distinguished and authoritative exposition of "The Sciences of the Ideal" we were led to understand that science might be developed from assumptions that possess "but a remote relation to the physical world." With apologies to the mathematicians for the quotation, the following were among the words used:

"Pure mathematics is concerned with the investigation of logical consequences of certain exactly statable postulates or hypotheses. * * * For the pure mathematician, the truth of these hypotheses or postulates depends, not upon the fact that physical nature contains phenomena answering to the postulates, but solely upon the fact that the mathematician is able, with rational consistency, to state these

assumed first principles, and to develop their consequences." I think my Saharan mine was a rational statability and that I developed the logical consequences.

I do not conceive science to be such as this. Ideas and ideals seem to me to be realities as thinking events, but they do not bring into existence the subjects of thought—unless these be themselves. I hold that demonstrable logical relations are as much embodiments in the system of things as are the materials, energies and motions of the system, and that our primary perception of the logical comes from such embodiment as truly as our perceptions of matter, energy and motion. For convenience we will generalize all these by neglecting the complexities of special concrete embodiments and thus we reduce them as nearly as practicable to what we call the abstract, but the essential element of concreteness in its most generalized form is retained and holds the intellectual process to the limitations and relations of the concrete, or else, I think, there is no safety in either the processes or the conclusions. Doubtless this statement is liable to misapprehension, for in this field of thought one must adapt speech to unwonted uses to which another has no accurate key. Doubtless the proposition, if correctly apprehended, might be challenged. Let us therefore return to the safer ground of the more tangible.

The scientific and the non-scientific, as I see the matter, are distinguished from one another at the very first step of procedure. The initial step in scientific procedure is to look to the facts. If the procedure lies far out on the borders of the scientific field, where facts are few and ratiocination is to make up most of the procedure, it is all the more requisite that such few facts as there are be brought into the process and used with the greatest assiduity and the most scrupulous circumspection. It is furthermore necessary that such assumptions as are not directly supported by available facts shall be scrupulously accordant with well-determined principles, and that these principles be known to be habitually embodied in the field in which the problem lies. An assumption at variance with, or aside from, the established principles of the field involved, carries the whole procedure outside the realm of science, as I understand science, and into the field of romance.

In the good old school-days, mathematical romance was closely mingled with the mathematics of reality. Mental arithmetic was held to be a superlative discipline, and with some justice, but questions of the following kind found a place with those of better birth: "If the third of six were three, what would the fourth of twenty be?" These questions were held sufficiently important to find a place in teachers' examinations and I encountered one in my first candidacy for a certificate. I have never been ashamed that, at the risk of results, for I understood perfectly what was meant, I answered substantially

that the fourth of twenty is five under any and all circumstances and is in no way affected by erroneous suppositions about the third of six. The first part of the question assumed organic insanity, the second part assumed a return to partial sanity in the subsequent proceeding, but not to complete sanity. To preserve a consistent basis of procedure, such a question should read something like this: If a mind were so insanely constituted that it supposes the third of six is three and if it were proportionately insane respecting other mathematical relations, what would be its insane conception of the fourth of twenty? In my own field there is an embarrassment of illustrative cases of the like import, but you cannot fairly be supposed to have made the personal acquaintance of such a multitude of unfortunates, and besides the edges and angles of the few in the mathematical field are cleaner cut and keener, and that is doubtless why the philosopher of the ideal and he of earth alike have recourse to them. To me it seems that if the logical system of thought on which mathematics is founded be in organic error in one vital particular, the rest of the system carries no presumption of trustworthiness. And so generally, if the mind permits itself to go outside the existing order of things in its adoption of an imaginary postulate not strictly in harmony with known entities and relations, there is little more ground for confidence in its processes than in its assumptions. The sanction of sanity rests as much with postulates as processes. The canons of scientific procedure require that both shall be tested to the utmost before adoption, all the more so in proportion as they may be lacking in the support of a body of determinate facts. If an intellectual structure is to be built on a slender basis, it is the more important that the basis be solid and strong. No strength is acquired in mid-air, unless new attachments to substantial truth are added.

(4) Not only does the scientific procedure require special circumspection relative to the foundation, but further scrutiny at every step with constant loyalty to embodied facts and principles. If any term is allowed to slip outside the limits of actual or symbolic reality into strict unreality, there is, I think, no dependence on the results. If at any stage, a ghostly factor is permitted to replace a concrete factor, or its generalized substitute or symbol, a ghostly result is likely to follow. In the physical sciences, the chief preventive of and remedy for insidious errors of all kinds is an unceasing testing of every step by related phenomena or by crucial experimentation. The logical process by itself commands but little confidence beyond the simpler steps, because experience has disclosed a multitude of pitfalls set all along its path and has revealed its oft-occurring incompetency. Why should we rest much on unassisted logic in the solution of the complex problems of the world, when it must be conceded that all the powers of ratiocination that came into function between the days of the Para-

doxides and the present, working alone, unaided by experimental means, would scarcely have discovered the elements or the internal logical relations of a pinch of salt? Workers in the physical field long ago learned that they must keep in close touch with concrete realities. They have found this especially necessary in such exploratory work as involves hypotheses and logical deductions when facts are yet few and poorly determined. Safety here, so far as there is any safety, depends on a constant recurrence to such facts as are available, conjoined with an ever-present realization of the uncertain basis of the whole procedure.

To the worker in the field of substantial science the following is a sufficient working guide: *Whatever has been embodied in the system of things of which we are a part, may be assumed to be a worthy subject of research; whatever has not been so embodied may be safely neglected*, even if we could suppose ourselves competent to deal with it. A preacher may be allowed to put it thus: *Whatever the Divine Artificer has seen fit to use in the making of the system, we may safely study; whatever He found no use for, we may safely conclude has no value for us.*

Accepting as a primary tenet of faith that the system is genuine and honest, that our powers are adapted to give us true results when properly used, that it is our mission to use them, and that the highest productiveness comes from the closest contact with actualities of the system, we bid all workers join us in loyalty to these articles of faith and in fidelity to these working maxims. Let each enjoy the independence of a free worker, but let each accept loyally the realities he cannot escape. *Let everyone stand on his own feet, and let everyone keep his feet on the ground.*

ASSEMBLY OF THE COLLEGE OF AGRICULTURE
MORROW HALL, 10:00 A.M.

SERVICES OF NORMAN J. COLMAN TO AMERICAN
AGRICULTURE

COLONEL CHARLES F. MILLS
Editor of the Farm Home, Springfield

The very pleasant duty has been assigned me of briefly referring on this very appropriate occasion and place to the services of Norman Jay Colman to American agriculture. The honor of my selection for this very agreeable duty is highly appreciated, and I enter upon its discharge with the conviction that the man and his eminent services to American agriculture are deserving of a far more gifted compiler.

To the student of our literature pertaining to the farm, Mr. Colman is well and widely known as second to none of the active and successful promoters of American agriculture. The very full reports of the highly creditable and far reaching work for good of Mr. Colman, in advancing the best conditions of our agriculture, are well known to this assembly. It is fortunate for the interested student that the results of his labors have been so fully and widely published in the official records of the National and State Departments of Agriculture, the farm press and in the books relating to advanced methods in rural husbandry.

My effort will therefore be that of a compiler of the historical data necessary to complete the record for this occasion. All present, I believe, will rejoice in this fitting opportunity to refer to the familiar and worthy achievements of a patriotic, painstaking man who has merited the distinguished honors so freely bestowed upon him by a conservative, discriminating and appreciative constituency.

Mr. Colman was born on a farm near Richfield Springs, Otsego county, New York, and his abiding interest in farming pursuits has never been questioned. From an early age he was a diligent student, reading every volume in the common school library in his school district before the age of sixteen, and carrying on his other studies in his thoroughly characteristic manner. He worked his way through school by teaching in winter and attending the seminaries in the vicinity in summer, until twenty years of age, when his ambition to identify himself with the growing West influenced him to remove to Kentucky. Here he taught school in Louisville and thus provided himself with means to attend the Louisville Law University, where he took the degree of bachelor of law and later was licensed as an attorney. He practiced law at New Albany, Indiana, and was elected district attorney. In 1852, young Colman removed to St. Louis, con-

tinuing in the successful practice of his profession. His love for rural pursuits soon induced him to purchase a country home, and establish an agricultural journal known as *Colman's Rural World*, now of national reputation as an influential exponent of the best methods in all that pertains to advanced agriculture.

He soon became a prominent leader and advocate of agricultural progress in the Mississippi Valley. He was called upon to take an active part in every movement in behalf of the interests of the farmer, and became generally known as a forceful and eloquent advocate of better methods in farming and of state and national legislation needed to give the producer the full return for his labors.

His loyalty to his constituency and his unswerving devotion to the farmers' interest prompted the agricultural classes to secure him the following well-merited honors, viz: a member of the Missouri Legislature, Lieutenant-Governor of his state, president of the Missouri State Horticultural Society, president of the Missouri State Board of Agriculture, trustee for fifteen years of the Missouri State University, president of the Missouri State Press Association for two terms, United States Commissioner of Agriculture, and when the United States Department of Agriculture was created he was made the first secretary.

But few persons appreciate the magnitude of the work accomplished by Mr. Colman in behalf of our agricultural interests. It was more than a score of years ago, that he took his seat as United States Commissioner of Agriculture, under the appointment of President Grover Cleveland. At that time the standing of the department was low. It was the butt of ridicule of the Washington correspondents of the public press. The great interests it represented had no voice in the President's cabinet. Not a single government experiment station existed in connection with an agricultural college or university in the United States. Many of the most important and useful divisions now existing in the department had never been thought of, or at least established. At that time also that terrible and incurable disease of contagious pleuro-pneumonia existed among our dairy herds and in cattle yards in various parts of the United States.

It was a critical period in the history of the department, and it needed a man of great administrative and executive ability to place it in that position which the great interests it represented entitled it to occupy.

Fortunately, the right man was found to take charge of it and place it on the high plane it should occupy. Its elevation could be made only by slow degrees. Congress must furnish every dollar required to raise the quality of the work and expand it. Great diplomacy was necessary to secure the proper appropriations. It was only by showing Congress the value of the work being accomplished that new and increased appropriations could be secured.

Mr. Colman was well equipped for the important work to which he was assigned. For more than thirty years prior to his appointment he had been editor of the leading agricultural paper of the Mississippi Valley. He had discussed not only with pen, but with tongue, the great problems that confronted the farmers, and that were identified with their interests. He was a forcible and eloquent speaker, and always held the rapt attention of his listeners. But few public meetings in his section were held where agricultural interests were considered at which he was not one of the invited speakers. Having been born and brought up on a farm, and having been a practical, as well as theoretical farmer all his life, he was in close touch and sympathy with his brother farmers. He knew their needs and also what was necessary to be done to secure them. He was well aware of the great prejudice existing against theoretical farming, or "book larnin'" as it is sometimes called, then existing to a far greater extent than at the present day. He had had legislative experience, which was of much value in enabling him to deal with Congress, in order to secure proper appropriations to elevate the standard of the department. He had served as a member of the legislature of his state, and also as Lieutenant-Governor, presiding over the senate.

We have presented these facts in order to show how well equipped he was to fill the important position to which he had been elevated, and it was to this admirable equipment that his great success was attributable.

He repeatedly told us that in accepting the office his highest ambition would be achieved, if he could secure government experiment stations, or experimental farms in connection with our agricultural colleges, so that practical and scientific agriculture could walk hand in hand, and thus obviate the prejudice which existed against scientific farming. The other object of his ambition was to make the department worthy of becoming one of the great executive departments of the government, with a voice in the President's cabinet, during his administration. By his wise administration of the office, both houses of Congress passed a bill almost unanimously, creating it one of the great executive departments of the government, and Mr. Colman had the distinguished honor of being appointed the first Secretary of Agriculture.

The bill establishing experiment stations in connection with our agricultural colleges was also passed, and the stations put into practical working order during his administration, so that both of the highest objects of his ambition were accomplished.

But it is much easier to tell of the achievements of these great objects than of the steps that had to be taken to secure them. And first, as to the establishing of experiment stations. Feeling that it was essential to achieve the coöperation and influence of the agricul-

tural colleges in order to secure the passage of a bill through Congress to create them, Mr. Colman, not long after taking his seat as Commissioner, issued a call to the agricultural colleges in every state of the Union, requesting them to send delegates to a convention to be held in the department building in Washington, July 8, 1885. This invitation was accepted, all the colleges sending delegates, forming what history will proclaim on account of the great results achieved by it, one of the most important agricultural conventions ever held. By unanimous vote Mr. Colman was chosen president of the convention, and that part of his address relating to experiment stations was referred to a special committee, to which Mr. Colman was afterward added, and that committee finally reported the Experiment Station bill, which was afterwards passed by Congress and approved by the President, establishing experiment stations in every state in the Union. Mr. Colman thought that by enlisting the coöperation and active work of each of the agricultural colleges in the different states and of the senators and representatives in Congress, such a bill could be passed, and the result was a justification of his judgment.

To secure the passage of a bill evolving the department into one of the great executive departments of the government was a much more difficult task. Mr. Colman knew that this could only be accomplished by the department meriting such promotion. It must be made worthy of such advancement. It would take too much space to give a history of the work accomplished by him, during his four years' term of service. We can only refer to a few of the many things secured under his administration.

The first matter that attracted his attention was the stamping out of that dread disease among our cattle, known as contagious pleuro-pneumonia. It was found to exist in nearly twenty states of this Union. The disease is incurable, and the only way to extirpate it was to kill every affected animal and every animal that had been exposed to an affected one. Whole herds had to be slaughtered. Of course great opposition was raised to such action, but the heroic course was the only safe way to proceed. Millions of dollars were required to pay for slaughtered herds, but Congress freely made the proper appropriations, and this dread disease was practically eliminated from this country during his administration.

The great fruit growing interests of the nation had been overlooked by the department, and one of his first acts was to take them under consideration, and establish a division of pomology to look after and encourage the interests of the fruit growers in all parts of the United States. It has become one of the leading divisions of the department.

Another of the important divisions established was that of vegetable pathology. Vegetable life is fully as subject to disease as

animal life. Mildews, blights, rusts, smuts, moulds destroy millions of dollars worth of crops annually, and to guard against these diseases, and to give remedies for them, and to recommend such courses of cultivation as to avoid them, were the objects of Mr. Colman in starting this division.

The division of ornithology and mammalogy was also established by him in order to secure information as to which varieties of birds and smaller animals as gophers, moles, minks, skunks, field mice, etc., were friends, and which were enemies to the farmer, and how their depredations might be prevented.

The division of United States experiment stations was likewise established by him to take advantage of and utilize the vast fund of information to be secured at the various experiment stations of the different states of the Union, so as to make it available to those most needing it.

But it was not only in establishing new divisions, but in greatly extending the scope of those that existed that commended his work to Congress and to the active workers in the cause of agricultural progress. It was this great advancement that secured the confidence of the members of Congress and caused them to aid in the rapid elevation of the department.

It was, however, because of the establishment of experiment stations throughout the states of the Union, and the elevation of the department to one of the great executive departments of the government, during his administration, and his appointment as the first Secretary of Agriculture, that Mr. Colman will be longest and most widely known and remembered. So highly was his work appreciated that the Republic of France, through its Minister of Agriculture, conferred on him la croix d' Officier du Mérite Agricole, an honor which but few Americans have received.

The University of Missouri at its late commencement exercises, in recognition of his services to the cause of agriculture, conferred on him the honorary degree of LL. D. The Missouri State Horticultural Society, at its last session, created the office of Honorary Vice-President, and elected him to fill it for life, as a slight tribute for what he had done in behalf of pomology. Such appreciation of his services during his lifetime cannot be otherwise than most agreeable to him.

The official life of Mr. Colman referred to above covers but a small portion of his useful services to the farmer and stockman. Even a brief reference to the helpful services rendered the farmers of the United States by him in all the departments of rural life would fill several volumes.

The man we meet to honor today has not only rendered efficient and acceptable services to the farmers of the United States in the various state and national positions to which he has been chosen with

such hearty unanimity, but he has made an enviable reputation in the private walks of life as a good farmer and a successful breeder of the best types of registered live stock.

This brief and hastily prepared sketch would be far from complete without some reference to his long and highly esteemed services as a director in various registration and other live stock organizations, state fairs, industrial expositions, world's fairs, etc., but the time at my command will not allow me to refer to them further.

The distinguished honor bestowed on Mr Colman on this occasion by the conferring of the degree of doctor of agriculture by the great University of Illinois, has been well earned. His earnest and successful advocacy of the practice of the best methods in all that pertains to rural husbandry contained in the weekly messages he has sent through *Colman's Rural World*, to the progressive farmers of the Mississippi Valley for more than half a century is not the least of his great achievements.

His writings and speeches have made him a leader in the campaign of education he has so ably conducted, and his influence for good in encouraging the residents of the farm to obtain the best results in the growing of crops, breeding of live stock and perfecting the high standard of rural citizenship by the education of their sons and daughters cannot be measured or overestimated. All the honors that have been conferred upon him have been most worthily bestowed and particularly that of doctor of agriculture conferred by this University.

ASSEMBLY OF THE COLLEGE OF LAW
LAW BUILDING, 10:00 A.M.

INTERNATIONAL ARBITRATION

HONORABLE JACOB McG. DICKINSON

General Counsel of the Illinois Central Railroad Company, Chicago

In 1904 there was organized in Chicago an International Arbitration Society, and Doctor Edmund J. James was elected as president and at present holds that office. Its purpose is to promote the policy of submitting international disputes to impartial courts of arbitration instead of the decision of the sword.

Dr. James took the initiative in the propaganda in the Middle West to arouse and give expression to public sentiment for ratifying the treaties submitted by the President to the Senate at its last session, and it was through the enthusiastic and self-sacrificing efforts of him and his coworkers, whose zeal he aroused and constantly stimulated, that a large and representative meeting, held in Chicago, and presided over by Mr. Robert Lincoln, adopted resolutions favoring the extension by the government of the United States of the principle of international arbitration to all questions which cannot otherwise be brought to a pacific determination, and requesting their representatives in the United States Senate to exert their influence in behalf of such treaties and of their prompt consideration and approval by the Senate.

The great office in which Dr. James has just been installed, will not withdraw him from the humanitarian work of endeavoring to realize the wish expressed by Washington of banishing from the earth war, which he denominated a "plague to mankind," but rather with increased prestige, will consecrate him anew to the noblest aspiration that can in respect of mundane affairs fill the mind and heart of man. At the Mohonk Lake conference of this year, attended by many of the most distinguished judges, jurists, diplomats, educators and clergymen of the nation, and presided over by the Honorable George Gray, on the motion of Dr. Daniel C. Gilman, it was unanimously resolved to suggest to the universities and colleges of the United States that concerted efforts be put forth to secure among undergraduates early and careful consideration of the principles of international arbitration.

In compliment to your distinguished President, who is so conspicuously associated with this noble movement, and desiring, even though in an humble way, to collaborate with Dr. Gilman and his associates, I shall address you upon the subject of "International Arbitration."

It is a product of the centuries, the resultant of all ideas and efforts

for the substitution of some other tribunal than that of war for the adjustment of international affairs. Every theory of the doctrinaires, however impracticable for the times, which contained a germ of truth, as well as every real achievement, no matter how small in comparison with the total of international depravity which prevailed, has become a common heritage of humanity, an inspiration transmitted from age to age, advancing the thoughts and ideals of men and preparing them for international arbitration, which, entering upon a new era about 1815, has so progressed in our time that no one can doubt that it is the most powerful force now working upon the nations for the temporal happiness of mankind.

International arbitration, as we know it, is no more a product of the last hundred years than was the Federal Constitution of 1789 a product of that year. It is a flower of our time, but the roots of the plant which matured it found their beginnings in the soil of previous centuries.

The Amphictyonic Council, the earliest institution established by independent states clothed with the office of preventing war between themselves, antedating authentic Greek history and enduring for more than fifteen hundred years; the arbitration of the rights of Adrastus and Amphiaraus to the Kingdom of Argos; the adjustment of the conflicting claims of the Athenians and the Megarians to Salamis; the plan of Henry IV to consolidate Europe into a practical federation of all the powers to be styled the "Christian Republic," with assurances for liberty of commerce and the establishment of a general council modeled upon that of the Amphictyons; the epochal work of Hugo Grotius, coming as one of the greatest boons to humanity at a period of its greatest agony, a fair flower of peace springing up in the midst of the carnage of the Thirty Years' War; the plan of William Penn, published in 1693-94 and entitled "An Essay Toward the Present and Future Peace of Europe by the Establishment of an European Dyet Parliament or Estates," which proposed that the sovereigns of Europe should meet by deputies in a "General Dyet" and establish rules of justice between themselves, that a "Sovereign Assembly" should adjust differences and coerce recalcitrant states, that a balance of power should be maintained by the distribution of votes, and that unwilling powers should be forced to adhesion; the "projet" of Abbé Saint Pierre in the eighteenth century, which embodied the essential principles of the plans of Henry IV and Penn; the scheme put forward by Bentham, 1780-1889, for an international tribunal to secure universal and perpetual peace, in which he proposed a reduction of armaments and coercive powers, and as a last resource the enforcement of decrees by a contingent furnished by the several states, but, exalted above all other effective remedies, publicity, the promulgation of the decision and an appeal to the enlightened judgment

of mankind, which would by its moral force, put recalcitrant nations under the ban of public disapprobation; the plan of Kant of 1796 to establish a "Universal Union of States," such as would obliterate separate governmental independence, or a voluntary "Permanent Congress of Nations," which might determine their differences by a civil method; all of these are a part of the literature of international arbitration, although some of them were chimerical and others really did not embody any essential principle of international arbitration. They were all antagonistic to continuous wars and advanced in a greater or less degree the cause of peace.

The thoughts and sentiments thus implanted in the mind of humanity, though, like all great things, slow of development, at last stirred the public conscience and subdued, having as a powerful auxiliary the economic conditions involved in the direct and indirect costs of modern warfare, the fierce tendencies of nations. But little practical progress was made during the period of blood and carnage that prevailed until the beginning of the nineteenth century.

The formation of our federal Constitution, creating for the first time a court with full and final power to settle all controversies between sovereign states, was the greatest step ever taken toward substituting judicial procedure for appeal to arms.

About a year ago the supreme court gave judgment in a large sum in favor of South Dakota against North Carolina, which was promptly paid, although it was earnestly contended that the court had no jurisdiction over the controversy.

The Jay treaty of 1794 contained provisions for adjusting by arbitration three questions which threatened to involve us in war with Great Britain, and under it three separate boards of arbitration were created. Our treaty of 1795 with Spain likewise contained a provision for arbitration. By the Treaty of Ghent in 1814 three boards of arbitration were created.

After the overthrow of Napoleon a general reaction began in all civilized countries against barbarous methods of settling disputes. Peace ideas were fostered and promoted in every way. Peace societies and peace congresses constantly stirred the conscience of the world.

The Treaty of 1848, which concluded peace between the United States and Mexico, provided that the two nations would in the future adjust their disagreements by pacific negotiations and by arbitration.

In 1851 the Committee on Foreign Relations reported to the United States Senate a resolution declaring that it was desirable to secure in treaties a provision for arbitration. Similar resolutions were introduced in Congress in 1854, 1872, 1874, and 1888.

The treaty which most profoundly influenced the ideas of the world on the subject of arbitration was that of Washington of 1871, which provided four arbitrations.

John Morley says:

"The Treaty of Washington and the Geneva arbitration stand out as the most noticeable victory in the nineteenth century of the noble art of preventive diplomacy and the most signal exhibition in their history of self-command in two of the three chief democratic powers of the Western World."

The arbitration held in Paris in 1893, in the Fur Seal case, and the arbitral tribunal, which decided the Alaskan boundary dispute, were next in importance. There have been upward of two hundred instances since 1815 where international differences have been settled by reference to arbitration and quasi-arbitration, and the United States has been a party to more than sixty of these.

A variety of questions, such as those involving disputed boundaries, injuries to public and private property and persons, disputed sovereignty over islands, seizure of ships, and interference with fisheries and commerce, have been peaceably and economically adjusted, which in former times would probably have led to war. Although it has been often said that questions of national honor cannot be submitted to arbitration, experience has shown that the term "national honor" is variable and in some degree shadowy, and that many questions which, under a former code, would have been catalogued under "national honor" have been submitted and settled in this way, even though at the outset, as was said by Lord Russell in regard to the Alabama claims, such a submission was thought to be incompatible with national dignity.

The Hague conference stands as the most notable event in the history of the world bearing upon international peace. The nations participating were Germany, United States of America, Austria-Hungary, Belgium, China, Denmark, Spain, France, Great Britain and Ireland, Greece, Italy, Japan, Luxemburg, Mexico, Montenegro, Netherlands, Persia, Portugal, Roumania, Russia, Servia, Siam, Sweden and Norway, Switzerland, Turkey and Bulgaria, twenty-six in all, represented by one hundred members. Of the independent governments of the world, the Central and South American Republics, the Sultanates of Morocco and Muscat, the Orange Free State, the Principality of Monaco, the Republic of San Marino, and the Kingdom of Abyssinia were the only ones not represented.

The conference held ten sessions, the last being on July 29. They agreed for submission for signature by the plenipotentiaries up to December 31, 1899, on three conventions and three declarations to form so many separate acts. The signatory powers agreed to use their best efforts to insure the pacific settlement of international differences; in cases of disagreement or conflict before an appeal to arms, to have, as far as circumstances allow, recourse to the good offices or mediation of one or more friendly powers; to sanc-

tion, even during hostilities, the intervention of powers, strangers to the dispute, by offering their good offices as mediators in reconciling opposing claims and in appeasing feelings of resentment. They recommended, when circumstances will allow, a resort by the parties at variance to special mediation of powers selected by them, and during the period allowed for the execution of such mandate the states in conflict shall cease from all direct communications. In differences involving neither honor nor vital interests, and only matters of fact, they recommended that the parties interested institute an international commission of inquiry, whose report shall be limited to a statement of the facts, and shall be only advisory.

Title IV deals with international arbitration. It defines as its object "the determination of controversies between states by judges of their own choice upon the basis of respect for law," and declares that the signatory powers recognize arbitration as the most efficacious and most equitable method of deciding questions regarding the interpretation or application of international treaties. Then follows the solemn declaration that "the agreement of arbitration implies the obligation to submit in good faith to the decision of the arbitral tribunal."

They undertook to organize a permanent court of arbitration, accessible at all times, which shall have jurisdiction of all cases of arbitration unless the parties shall establish a special tribunal.

An international bureau at the Hague is provided for, which shall be the record office for the court. Each signatory power shall select not more than four persons of recognized competence in questions of international law, enjoying the highest moral reputation, who shall constitute the court, the term of each appointee to be for six years, with capacity for renewal.

Signatory powers resorting to the court must select arbitrators from the list of members, each party, in the absence of special agreement, to select two, and these together, an umpire; but if they divide equally, then the choice of umpire shall be made by a third power selected by the parties. To give dignity to the court, its members, while in the discharge of their duties and outside of their own country, shall enjoy diplomatic privileges and immunities.

The court shall sit at the Hague, unless in cases of necessity the parties shall agree on a different place. Non-signatory powers may submit to the jurisdiction. It is declared by Article XXVII that the signatory powers consider it their duty to remind each other that the court is open to them, and that such act can only be considered as an exercise of good offices.

In acceding to this article, the representatives of the United States presented a declaration which was received without objection by the conference, that nothing contained in the convention should make it

the duty of the United States to intrude in or become entangled with European political questions or matters of internal administration, or to relinquish the traditional attitude of our nation toward purely American questions. It was regarded by our representatives that such a caveat was necessary to negative an implied abandonment of the Monroe Doctrine. The occasion was utilized for officially announcing the Monroe Doctrine to the assembled representatives of all the great powers and obtaining their implied assent to it.

The award shall be by a majority of votes in writing, signed by each member, and setting forth the reasons for the decision. The minority may, in signing, state their dissent. There shall be no appeal; but in the submission a right to demand a rehearing may be reserved, based only on the discovery of new facts. It was early made manifest that not one of the nations represented was willing to agree to compulsory arbitration.

Sixteen powers signed this treaty on July 29th. It was ratified unanimously by the Senate of the United States on February 5, 1900. All of the powers represented at the conference have signed it. They govern nine-tenths of the world, and their populations embrace fourteen hundred millions of the total sixteen hundred millions of the earth's inhabitants.

Although not invited to become parties to the Hague convention, the South American Republics, animated by a spirit that rose above all littleness, and which commanded the admiration of the world, by a resolution passed at the Mexican International American Conference in 1902, recognized the principles set forth in the three Hague conventions as international law, and conferred upon the United States and Mexico the authority to negotiate with the other signatory powers for their becoming parties to these treaties. President McKinley appointed Ex-presidents Harrison and Cleveland as two of the American members of the court, the former accepting and the latter declining.

There had been other peace congresses, such as the conferences of Münster and Osnabrück in 1648, those of Utrecht in 1713, of Paris in 1763, the Congress of Vienna in 1815, and that of Berlin in 1878; but as Mr. Holls, one of the members of the Hague conference from the United States remarked:

"The vital distinction between these gatherings and the peace conference at the Hague is that all of the former were held at the end of a period of warfare, and their first important object was to restore peace between actual belligerents; whereas the peace conference was the first diplomatic gathering called to discuss guarantees of peace without reference to any particular war—past, present, or prospective."

"Before this court was established nations drifted into war. A

difference arose; a vista revealing an opportunity for party advantage opened up to the demagogue, who is nothing if not loudly and aggressively patriotic; issues where obscured or falsified; some of the public prints misled and fired popular sentiment; all rational intercourse between the contending nations was made impossible; other powers failed to intervene; there was no tribunal whose offices had been previously sanctioned to appeal to; and war was the inevitable consequence."

No event that has transpired in history has even approximated the profound and lasting effects of this conference upon the peace of the world. International law had been evolved by jurists, and its principles had from time to time been sanctioned by occasional recognition of nations. It was merely a collection of moral teachings upon relations between governments. By this treaty practically all of the powers of the world gave formal assent to some of the most important principles of international law, and established a permanent court composed of competent jurists from all nations, open at all times for its continuous development and sanction, a court to which it is made the duty of all signatory powers to admonish other signatory powers which have differences to resort; it being expressly provided that such reminder shall be regarded as an exercise of good offices.

As Americans, whose government has always been in the advance guard contending for humanitarian principles, we take a laudable pride in the fact that the United States proposed to our sister republic of Mexico to submit to the Hague tribunal the Pious Fund controversy, the first case brought under its authority.

The reference of the Venezuelan case to the Hague was an event of vast import. The interested powers suggested that the President should decide the controversy. He wisely declined this, and recommended that the offices of the Hague tribunal be invoked. His reasons are admirably stated in his message to Congress, December 7, 1903:

"It seemed to me to offer an admirable opportunity to advance the practice of the peaceful settlement of disputes between nations and to secure for the Hague tribunal a memorable increase of its practical importance. The nations interested in the controversy were so numerous, and in many instances so powerful, as to make it evident that beneficent results would follow from their appearance at the same time before the bar of that august tribunal of peace.

"Our hopes in that regard have been realized. Russia and Austria are represented in the persons of the learned and distinguished jurists who compose the tribunal; while Great Britain, Germany, France, Spain, Italy, Belgium, the Netherlands, Sweden and Norway, Mexico, the United States, and Venezuela are represented by their respective agents and counsel.

"Such an imposing concourse of nations presenting their arguments to and invoking the decision of that high court of international justice and international peace can hardly fail to secure a like submission of many future controversies. The nations now appearing there will find it far easier to appear there a second time, while no nation can imagine its just pride will be lessened by following the example now presented. This triumph of the principle of international arbitration is a subject of warm congratulation, and offers a happy augury for the peace of the world."

The settlement of the North Sea incident, the way to which was opened up directly by the Hague convention, greatly increased the confidence in its beneficence and gave assurance of its efficacy in maintaining the peace of the world.

When it became known that the Baltic fleet had fired at Dogger Bank upon English fishermen, the most intense excitement prevailed all over the world and war between Russia and Great Britain seemed imminent. Great Britain made known to Russia that apology, disclaimer, reparation to sufferers, a searching inquiry followed by punishment of responsible parties, and security against repetition of such incidents would be expected, and when there was delay in adequately responding to these views it was further communicated that if the Russian fleet continued its course without calling at Vigo in Spain, there might be war before the week was over. The fleet stopped at Vigo and Admiral Rojestvensky gave his version of the affair. Notwithstanding his statement Great Britain pressed her demand coupled with a proposition for a court of inquiry analogous to that provided for by the Hague convention. Russia made a similar proposal under the Hague convention.

Thus was brought about through the direct inspiration of the Hague convention, the international commission, composed of British, French, Russian, Austrian and United States admirals, which by its finding of February 25, 1905, averted a war between two powerful nations.

Since the Hague convention, over thirty treaties providing for obligatory arbitration have been signed and the one between Denmark and the Netherlands makes no reservation whatsoever.

During the last year the Hague court has denied the contention of Japan that she had a right under her treaties of commerce with western powers, to tax improvements on land held by foreigners under perpetual lease.

The question of the French protectorate over the Sultan of Muscat, has, under the treaty between France and Great Britain, been referred to that tribunal.

The outlook was never brighter for widening the usefulness of the Hague tribunal and we may confidently expect through its instru-

mentality, a systematic and harmonious development of international law.

Under the corrective influence of international jurists, unsound doctrine will be repudiated. This is more easy of accomplishment by the Hague court than by any other. The same members are rarely chosen to sit. There will be a constant change in judges. As new cases arise, not having any pride of opinion in the decisions of others, they will the more promptly expound as the law that which the enlightenment of the time shall demand, for international law will always develop and stand as the exponent of such international justice and morality as the consensus of nations shall approve.

The rejection by the Senate in 1897 of the treaty between the United States and Great Britain known as the Olney-Pauncefote treaty, profoundly stirred the country, and it was felt that the United States, for so long a time the recognized leader in the modern development of peace movements, had taken a backward step. Again there was deep disappointment and wide and outspoken dissatisfaction when the Senate at the last Congress amended the treaties negotiated between this country and France, Great Britain, Germany, Italy, Portugal, Switzerland, Spain, Austria-Hungary, Sweden and Norway and Mexico. They were all alike and substantially like those concluded between Great Britain and France and other countries. A like treaty was concluded with Japan on the day the Senate acted on the other treaties and on account of such action, was not submitted to the Senate. The Senate has been memorialized by a large meeting of representative citizens which met in Washington in January, 1904, to ratify these treaties. They were approved by the National Board of Trade, the Commercial Club of Chicago, the New York State Bar Association and by commercial bodies all over the country.

Article I of the Anglo-French treaty provided as follows:

"Differences which may arise of a legal nature, or relating to the interpretation of treaties existing between the two contracting parties, and which it may not have been possible to settle by diplomacy, shall be referred to the permanent court of arbitration established at the Hague by the convention of the 29th of July, 1899, provided, nevertheless, that they do not affect the vital interests, the independence, or the honor of the two contracting states, and do not concern the interests of third parties."

This was a general obligation assumed by the contracting parties to submit all questions outside of the excepted classes to arbitration.

Article II provided that: "In each individual case the high contracting parties, before appealing to the permanent court of arbitration, shall conclude a special agreement."

The Senate by a vote of fifty to nine, amended Article II by substituting the word "treaty" for "agreement." In doing this it

acted clearly within its rights. There is no doubt that the Senate could provide, if it had been willing to do so, for special cases as they might arise under a general treaty. Such action would satisfy both the letter and the spirit of the Constitution.

It has been published from sources represented as authentic notwithstanding the veil of secrecy enshrouding the proceedings of the Senate, that a reason for the amendment was that it was understood by senators that the President would regard the word "agreement" as conferring upon him full power to enter upon arbitration with a foreign power on any question embraced in the treaty, without submitting the case to the Senate, and that the term, "of a legal nature," would embrace all such claims as the Alabama question, the indemnity claimed by Columbia and our action as to the Panama Canal, and that under "interpretation of treaties," the President might submit to arbitration our commercial rights in China, the threatened trade retaliation of Germany and many other questions of the utmost importance to which the Senate should give special consideration.

The President forthwith upon the action of the Senate, abandoned the treaties. This was regarded by some of the ablest and most earnest friends of international arbitration, notably Hon. John W. Foster, as unwise, and that the action of the President as well as that of the Senate was unfortunate.

It leaves America alone of the signatory powers to the Hague convention, in not having entered into a treaty providing for submission of cases as they arise to that tribunal. Notwithstanding the effect of the amendment of the second article, it was regarded by many that the moral obligation assumed under the first article was a glorious step in the cause of international arbitration.

However friends of arbitration may differ as to the effect of the action of the Senate and that of the President, it is certain that nothing done in respect of these treaties will seriously retard the cause. Public attention has been challenged as never before, discussion has been more general and profound, zeal has been stimulated to a higher degree than ever, and when action follows, it will go distinctly in advance of the highly conservative boundaries maintained in those treaties.

In 1888, upon the initiative of Randal Cremer, a member of the British Parliament, was established the Interparliamentary Union. It is made up of men of every class and condition, the only indispensable requirement for admission being that they shall be members of some national parliament.

Secretary Hay has stated that in the conference held by the union in Holland in 1894, the declaration made by it in favor of a permanent court of arbitration was a forerunner of the most important

achievement of the peace conference of the Hague in 1899. Its membership, now exceeding two thousand, and the prestige it has gained by its wide activity, command the greatest consideration, as is shown by the fact that it was invited by Congress to hold its 1904 meeting at the St. Louis Exposition, and fifty thousand dollars were voted for the entertainment of the delegates. At that meeting, by unanimous vote, a resolution was adopted as follows:

"Whereas, enlightened public opinion and modern civilization alike demand that differences between nations should be adjudicated and settled in the same manner as disputes between individuals are adjudicated, namely by the arbitrament of courts in accordance with recognized principles of law, this conference requests the several governments of the world to send delegates to an international conference to be held at a time and place to be agreed upon by them for the purpose of considering:

1. The questions for the consideration of which the conference at the Hague expressed a wish that a future conference be called.
2. The negotiation of arbitration treaties between the nations represented at the conference to be convened.
3. The advisability of establishing an international congress to convene periodically for the discussion of international questions.

And this conference respectfully and cordially requests the President of the United States to invite all the nations to send representatives to such conference."

On the 24th of September, 1904, this resolution was presented to the President by a large representation of the delegates to the union. The President at once announced that he would, at an early date, invite the other nations parties to the Hague convention, to reassemble with a view of still further advancing the work already so happily begun.

In pursuance of this action, on October 21, 1904, Secretary Hay addressed a letter to the representatives of the United States accredited to the governments signatories to the acts of the Hague conference, directing them to bring the matter to the attention of the ministers of foreign affairs of the governments to which they were severally accredited, to ascertain to what extent that government would be disposed to act in the matter. He concluded as follows:

"You will state the President's desire and hope that the undying memories which cling around the Hague as the cradle of the beneficent work which had its beginning in 1899 may be strengthened by holding the second peace conference in that historic city."

The replies received to this communication indicated that the proposition had been received with general favor. No dissent was made known. The governments of Austria-Hungary, Denmark, France, Germany, Great Britain, Italy, Luxemburg, Mexico, the

Netherlands, Portugal, Roumania, Spain, Sweden and Norway, and Switzerland exhibited sympathy with the purpose of the proposal, and generally accepted it in principle. Japan and Russia replied with friendly recognition of the spirit and object of the invitation, but on account of the existing war, it did not seem to Russia to be practicable at that moment, to take part in such a conference. Japan made the reservation only that no action should be taken by the conference relative to the then existing war.

In a subsequent communication, it was further suggested to all the powers that the further and necessary interchange of views between the signatories of the Act of 1899, be effected through an international bureau under the control of the permanent administrative council of the Hague. Now that the great war which held the proposed conference in abeyance has been terminated, it has been announced (on the fourteenth of this month) that the Czar has again taken the initiative and has invited another conference of the Hague. We may confidently look forward to a second conference which will, with advanced views, take up not only the questions which were reserved at the former conference such as the rights and duties as neutrals, the inviolability of private property in naval warfare and the bombardment of ports, towns and villages by naval force, but the proposals for further increasing the power of the court and the obligation to submit controversies to it along lines which would not have been seriously contemplated by any of the greater powers in 1899.

That Japan and Russia, two of the signatory powers, plunged into war without resorting to the Hague tribunal, gives no ground for serious concern as to the future of arbitration. No one but a dreamer ever expected all war to be abolished. The world was not expected to be petrified into states in their present form without the possibility of a change of territory. It is manifest that there was no place for arbitration between Russia and Japan. The advancement of Russia, and its acquisition of new territory in a country foreign to Japan presented no question of title as between these two nations. The belief of Japan, that such encroachment jeopardized its future prosperity and the very life of the nation, presented no question which could be solved by any principles of international law.

It was a case where a policy of expansion, deemed to be essential for national prosperity, was regarded by another power, though not the owner of the territory in question, as vitally inimical to its welfare. Such a question could only be settled by a voluntary abandonment of its position by one of the powers, or by war. No principle of international law applicable to the settlement of such a conflict has yet been accepted.

Although this great war cast a pall over the peace movement, and filled some of its advocates with despair, it also furnished the occasion

for one of the most dramatic incidents in history, one that will for all time stand as a precedent. President Roosevelt, he of the strenuous life, usually portrayed in his milder moods with a big stick, supposed by many to be so rash that his very existence imperilled the peace of the world, casting aside the old world restraints that imposed silence upon a nation so long as sister nations were engaged in cutting each other's throats, became the great apostle of peace, and acting within the spirit if not the letter of the Hague convention, opened up for pacification the way which Japan and Russia could not find for themselves. He not only won recognition as the foremost man of the world, but reestablished the prestige of the United States for peace, which had been seriously impaired by the rejection of the arbitration treaties. If his overture had been repelled, or if after negotiations had been entered upon, there had been no settlement, his intervention would have taken its place with other laudable but unfruitful efforts which are chronicled but do not change the current of history.

As surely as the stars fought against Sisera, so surely have they fought on the side of Roosevelt. His intervention was not only welcomed, but it was crowned with the most brilliant success. If he had left it to the stars alone, or the stars in conjunction with the Russian and Japanese, it would have been a fiasco. The history of that negotiation may not be fully disclosed in our time, but we know enough to feel assured that he pursued the work that he initiated with the tireless zeal and inexhaustible resources that characterize all of his undertakings, and that his supremest efforts were made at the darkest moment. A new phase in international relations has been developed, one that will be a powerful conservator of the peace of the world.

The University of Illinois, consecrated to the work of uplifting humanity, will, I trust, under its new leadership, by the action of both Faculty and students, give not merely the prestige of its great name, but its earnest coöperation in carrying international arbitration to yet higher and broader planes of effective operation.

ASSEMBLY OF THE COLLEGE OF LITERATURE AND ARTS,
THE SCHOOL OF MUSIC AND THE SCHOOL
OF LIBRARY SCIENCE.

THE CHAPEL, 11:00 A.M.

SOME RESULTS OF THE ELECTIVE SYSTEM

A. LAWRENCE LOWELL, A.B., LL.B.
Professor in Harvard University

Speaking of democracy, Edmond Scherer remarks that after all it is only a stage in an inevitable march towards an unknown goal, and merits neither the praise it calls forth, nor the dread it inspires. This is no doubt in some measure true of every movement. It neither plunges man into chaos nor leads him to paradise. It does not essentially change his moral nature and fortunately it does not lessen the need of moral effort. Improvements in agriculture may increase the crops, but they do not render plowing, sowing and reaping unnecessary.

Twenty years ago the college curriculum was earnestly discussed. In the larger colleges the old fixed courses of studies required alike for everyone was visibly breaking down; giving way not so much before the criticism of those who had lost faith in its usefulness, as before the assaults of newer subjects of learning which were, so to speak, clamoring for recognition in a program that could not make room for them. The time had come when no man could possibly learn all the things that educated men like to know. As Professor William James has observed, the aggregate ignorance even of the members of a faculty is encyclopedic. In fact, the defence of a fixed curriculum on the ground that it furnished a complete education had become an anachronism.

Some variation of studies is now permitted in almost all our larger colleges, and yet after a generation of experiments we have not reached a common opinion about the best form of curriculum. At first sight the policies of different institutions seem to be based upon radically divergent principles, and certainly their catalogues present almost every conceivable variety of system. Now such a condition after long experience might indicate that we were all on the wrong track, for error is more multifarious than truth. This supposition, however, need not be discussed. On the other hand, the condition may indicate that our paths are not so far apart as they appear: and this is, I believe, very largely the case. In the first place it seems to be universally conceded that so far as variations in the choice of studies are allowed at all, the choice between possible alternatives shall be made by the student himself. Then the chief differences between the

systems in use are rather in degree than in kind. They turn upon the question what subjects shall still be required, for something is still required almost everywhere: and they turn also upon the question how far the student shall be restricted in his choice. In all colleges he is restricted to some extent. Nowhere is he allowed to make a new choice every month; his selection in the freshman year is usually limited to a small number of courses; and he is constantly under the necessity of taking some elective that he may not care for, if he wants to take another elective of a more advanced character in the same field. At the present moment, for example, a student at Harvard must, as a rule, take a preliminary course in mediæval history, or in modern government, before he can elect American constitutional history. Restrictions of this kind arise from the nature of things. Those of a more general character deliberately imposed by college regulations are usually intended to secure, on the one hand, a certain concentration of work, and to prevent, on the other, excessive specializing. Such regulations differ a good deal in the amount of restriction imposed. In this University, for example, where the latitude allowed is rather large, a candidate for the degree of bachelor of arts must take for his principal subject electives in some one department amounting to not less than three, nor more than five-sixteenths of his total work; and he must take one-sixteenth of his work in each of five groups of studies. These groups are (1) English, (2) ancient and modern languages, (3) history, economics, and political science, (4) philosophy and mathematics, and (5) natural science. I was interested to see what proportion of the students under the elective system of Harvard actually comply with these conditions. Taking for the purpose the class that graduated this year, and discarding those men who had entered with such advanced standing as to relieve them of a year's work, there remained three hundred and sixty-one who had taken thirteen of the seventeen courses required for the degree of A. B. First as regards the scattering of electives among the five groups of subjects already mentioned: An amount of work equal to that which must be taken here is substantially required in two of them—English and modern languages: and for the other three groups all but thirteen of the three hundred and sixty-one men had taken some elective in history or political science, all but fifty-five had taken one in the group of philosophy and mathematics, and all but forty-one in natural science. In the great majority of cases, though not always, the proportion of time devoted to the subject was as large as that which must be done here. So that in this respect by far the greater part of the students fulfill the requirements made in the University of Illinois. As regards concentration of work the comparison is less exact, for the fields covered by separate departments vary much in different universities. In fact I made no statistics by departments, but by

eight groups of closely related departments. These cover on the average considerably more ground than the fifteen departments here, and hence the proportion of work in each of them would naturally be greater. Now I found that every one of the three hundred and sixty-one Harvard graduates had taken at least three courses in one of these groups of related departments. All but seven had taken four courses, and all but twenty-four, five courses. A large number of men had taken in one group more than the maximum amount permitted in a single department by the regulations of this University. But few of them took more than they might under the rules have taken here in a similar group of departments. In short the greater part of the class of 1905 at Harvard would have had to make no changes whatever in their choice of electives to comply with the regulations in force here, and for most of the rest the changes would probably have been slight.

Moreover, no regulations can in terms provide an absolute security against ignorance even of most elementary facts. It is theoretically possible, although in practice inconceivable, that a man might graduate either here or at Harvard, without having heard the name of Charlemagne, without knowing whether the Book of Job was written by Isaiah or by Aristotle, and without the faintest idea of the difference between a planet and a fixed star.

The time seems to have come when it ought to be possible to measure the ultimate results actually achieved by our various systems, and to substitute much more fully than heretofore experience for foresight. This is what I propose to do here in a tentative way for the only system of which I have had personal experience or the means of obtaining accurate information—that is the system of nearly free election. In doing so I have no intention of contrasting that system with others that I have not myself observed. An attempt to compare something of which one has had actual experience, with something else that one knows only by imagination, is more apt to show the prepossessions of the speaker than the relative merits of the things compared.

The subject naturally divides itself into material or external, and the moral effects of the system; and by the material or external I do not mean the financial,—although there can be no doubt that the free election system is highly expensive,—I mean the actual use made by the student of his freedom of choice.

In the discussions during the early days of the elective system grave fears were expressed that students would avoid the subjects requiring strenuous mental effort, and seek out those which were easy. It is no doubt true that mathematics is regarded as a severe training, and is not generally popular; but this is largely due to the immemorial tradition of boys' schools that mankind is divided into a small minority to whom mathematics presents no difficulty, and a

large majority who are by nature unfitted to learn it. The ordinary boy finding obstacles at the outset concludes that he belongs to the latter class, and had better leave the subject alone. There is also some tendency to avoid courses that are supposed to be peculiarly hard. On the other hand there seems to be no general purpose to select the easy, or as they are commonly called, soft courses. A student, especially if he is trying to carry more electives than he can attend to properly, will often take one or two that are reputed soft; and there will always be a small percentage of indolent men with whom the desire to shirk work is unusually strong. But both statistics and the opinion of those who are best qualified to judge, sustain the belief that any systematic attempt to base the choice of electives upon ease is rare,¹ and that is distinctly my own impression.

There are other reasons, also, why this should not prove a serious danger. Instructors do not like to have their courses thought soft, and it is only a man of strong individuality, of earnest faith in the real value of his work, who is indifferent to criticism of that kind. Nor is the existence of a very small number of such courses necessarily an evil. A couple of years ago I happened to see a collection of brief college reminiscences by all the members of a class that had graduated about ten years before. Among other things they spoke of their studies, and the course to which the largest number referred with grateful satisfaction was one that was notoriously easy. Without requiring much labor on their part a great teacher had opened their eyes to a new region of thought. Moreover, soft courses are not confined to an elective system. Of the few required courses in my own college days one or two were closely akin to a farce. I might, indeed, add that the minimum amount of work required for the degree of A. B. seems to me distinctly greater than it was in those days.

Another prevalent fear was that freedom of election would lead either to excessive specialization, or to such a scattering of choices over wide fields that the student would have a superficial acquaintance with many subjects, without a profound knowledge of any one of them. That each of the evils occurs in some cases cannot be gainsaid, but how often they occur may be illustrated from the choice of electives of the class of 1905. If we divide the subjects taught into eight groups, (1) ancient languages, (2) English, (3) other modern languages; (4) history and political science, (5) philosophy, (6) fine arts, (7) mathematics, and (8) natural sciences, we find that almost everyone took something in English, modern languages², and history and political science. About two-thirds of the class took some philosophy, about one-half some fine arts, rather more than half some classics, and

¹Cf. Report of President Eliot, 1884-85, pp. 39-45. Report of Dean Briggs, 1899-1900, pp. 116-17. "The Elective System at Harvard," Harv. Grad. Mag., June, 1903, p. 532, and some results compiled from the answers of recent graduates in Harv. Grad. Mag., March, 1902, pp. 357-360.

²These two subjects are practically required.

rather less than half some mathematics. Except, therefore, for classics and mathematics, which almost all the members of the class had studied at school, and for fine arts, which is treated in many places as quite outside the ordinary curriculum, the great bulk of the men had obtained in college at least a slight acquaintance with all the principal fields of knowledge. There were, of course, exceptions, and very bad ones. Three men, for example, devoted their time almost exclusively to natural science, or engineering, taking a little mathematics, just enough modern languages to read scientific books in a foreign tongue, and nothing else. These men failed to appreciate the object of a college education. But perhaps their error can hardly be ascribed to the elective system, for had they not been free to consecrate their time to science they would probably not have gone to college, but to a scientific school. Except for a few such cases of erratic over-specialization, the result cannot be said to justify the fear that under a system of free election students will concentrate their attention on one narrow field to the exclusion of other subjects with which all educated men ought to have some familiarity. In regard to the opposite peril, that of a general smattering of many things with a real command of none, the figures are interesting. Over ninety-four per cent. of the class took five or more of the seventeen courses required for a degree in some one of the eight groups already described; eighty per cent. took six or more courses in one of them; fifty-six per cent. took eight (that is about one-half) or more in one group; thirteen and one-half per cent. took eleven (that is about two-thirds) or more in one group, and, in fact, the tendency to concentrate a large part of one's choices in a single field seems on the whole to be growing.¹ With such an array of figures there might seem to be no danger of a lack of that concentration which insures a thorough knowledge of one subject. But this is not always true. Suppose, for example, a student were to choose the introductory courses in French, German, Italian, Spanish and Russian, he would have taken five electives in modern languages, and would not have more than a rudimentary idea of any foreign tongue. A choice like that would be absurdly improbable; and yet the only criticism of the elective system commonly heard among the instructors at Harvard is that too many men fail to take enough advanced work to acquire a mastery of one subject. One of the chief advantages, indeed, of the system is that it affords a chance to go far, even to the point of taking courses intended primarily for graduates; that it enables the student to make an offing on the sea of knowledge, and learn to sail in deep water. I do not say that this cannot be done under other systems, but I suspect that it cannot be done so well. The men who do it with a part of their electives, while scattering the rest broadly, get the best kind of training; but there are a considerable

¹Report of Pres. Eliot, 1884-85, pp. 21-24.

minority who do not do it, and never get much beyond work of a somewhat elementary nature.¹ This difficulty can be overcome if not by suggestion and encouragement on the part of the faculty, then by requiring a certain amount of advanced work in some department. But after all the number of elementary courses in any one field is small, and the figures already given upon the concentration of choice show that the prophesies of general smattering have not been fulfilled.

It would appear that the students as a rule concentrate a part of their electives upon one field, and scatter the rest broadly. No doubt the proportion of time allotted to the principal subject and the accessories, to the major and the minors, is by no means always wise. But probably no two professional educators would agree exactly upon what that proportion ought to be. In Oxford and Cambridge the honor degree is conferred after an examination in a single field or group of subjects. In this country we are generally in favor of a much wider basis for our colleges. At Harvard the Faculty has recently set up a standard, by deciding to grant a degree with distinction to students who attain a certain grade of excellence in work in one subject, or in closely related subjects, amounting to about one-half of all their studies; and this may serve as a type for the proper extent of concentration. After all education is not limited to the class room. A student ought to cultivate himself in other lines, both in college and throughout his life, and for the man who does not do so college has been little short of a failure.

If the fears that were aroused by the elective system have been only in small part justified, the hopes that were cherished have also proved in some measure delusive. It was assumed that each student would follow his natural bent, and it was believed that in so doing he would choose the subjects that he most needed for his own future career and his own intellectual growth. It was thought, also, that the very process of reflecting upon the problem of his own education would be of great value to him. Now, apart from the question how far a student's inclinations are his own best guide, apart from the eternal question of education as a pleasure and a discipline, of the relative importance of developing the strong and fortifying the weak mental qualities, apart from these things which bear upon the wisdom of a student's following his own bent, a large proportion of the students have no very definite bent; no clear idea of the object of college studies, or the means of attaining that object; and many of them have not decided upon their future career. Few of them have in their minds any general plan of education, and fewer still, perhaps, devote any systematic thought to an effort to work out such a plan, although in their defense it may be observed that the same criticism often applies to the discussions of professional educators.

¹Cf. Report of Dean Briggs, 1899-1900, p. 117. "The Elective System at Harvard," Harv. Grad. Mag., June, 1903, pp. 533-34.

The motives of the students for the selection of their courses are manifold, and doubtless not always either simple or completely conscious. In 1903 a committee of the Faculty at Harvard sent to students series of questions relating to the courses they had taken during the previous year. The students were selected so as to represent every grade of achievement in each course in the college, and more than seventeen hundred answers were received. One of the questions asked was the reason for electing that particular course, and although undergraduates are not more competent than other men to analyze aright the motives of their conduct, still the answers show what they believe their motives to have been, and the nature of the considerations they take consciously into account.

One of the motives most commonly given was a liking for the subject. This may mean anything from a strong interest to the passing fancy of a man who is obliged to choose among subjects for none of which he really cares, and hence it is too vague to form the basis for any conclusions.

Another motive that appears is a liking for the instructor, and this is wholly good. The liberty to select one's teacher is, in fact, among the chief advantages of the elective system, although it is not fully appreciated at the time by most undergraduates. In after life a man often looks back upon some teacher as a landmark in his education. An instructor suited to one pupil may not be suited to another; but the student with the discrimination or good fortune to come in contact with a man who stirs his enthusiasm for intellectual effort obtains a lasting benefit that far outweighs any intrinsic value in the subject he is taught.

Another motive assigned for the choice of subjects was their educational value, or the fact that they are an essential part of the equipment of a citizen, and one is naturally curious to see what subjects are viewed in that light. In their report the committee say, "It is noticeable that the students regard English and other modern languages, philosophy, history, geology and some other studies, as culture subjects in a higher sense than mathematics, the classics and most of the sciences."¹ Now it may be observed that these subjects which appear to be considered by the students as especially valuable for culture are on the whole the ones most largely chosen. The whole number of choices made by all the students last year (counting a half course as a half choice) was 13,463, and of these 3,136 were history, government and economics, 2,047 and one-half in modern languages, and 1,603 in English,² while seven hundred and sixty-four and one-half were in classics and four hundred and fifty-four in mathematics. It may be observed also that the subjects most largely chosen are

¹Report of the Committee on Improving Instruction in Harvard College, p. 9.

²This includes the required course in English, but the number of elective courses in English was, by chance, reduced that year below the normal.

those which a number of recent graduates, in response to a circular of the seminary of pedagogy, most commonly said they would like to see required. One cannot fail to regret the comparative neglect of the classics and of mathematics, the very subjects formerly regarded as the very basis of culture, and as the essentials in any liberal education. But it has been the result of a slow process, and in the case of the classics, at least, it is not due to any sudden revulsion against the old curriculum. In the year 1872-73, when the elective system was still in its infancy, elective courses in Latin and Greek were among the most numerously attended. One course in Greek contained two-fifths, and one in Latin three-fifths of the class, while five other classical courses contained one-fifth of the class apiece. Ten years later only one course in Greek and one in Latin contained a fifth of the class. In 1892-93 Greek disappears even from this category, and in 1902-03, although the number of largely attended courses had increased very much, a single Latin elective represents the classics among the courses that attracted one-fifth of the class.

A counterpart to the motive of culture is that of professional utility, which bulks large in the mind of the undergraduate. Strictly professional subjects are not supposed to find a place among college studies. But there is one important exception which is brought into strong relief by a survey of the choices made. Among the members of the class of 1905 there were forty-nine men who specialized to excess—for I suppose we should all agree that taking eleven or more courses out of seventeen is specializing to excess. Now mark how these forty-nine were distributed. One was in mathematics, three each in fine arts and modern languages, seven in ancient languages, fourteen in history and political science, and twenty-one in natural science. Of those who devoted themselves to history several, no doubt, proposed to practice law, for this often happens. Probably by far the greater part of the other specializers were studying their professions. Most of those in natural science were engrossed by engineering courses, and might more appropriately have been registered in the scientific school. The three men in fine arts may well have been preparing for architecture. It is safe to assume that almost all the rest intended to be teachers in colleges or schools. In short, among men doing what is properly college work over-specialization is largely confined to those who propose to teach. It is the future educators, the men of our own profession, who are especially guilty of that sin. To them the college is a professional school, and too often is not first of all a place to get a liberal education.

For the rest of the men the college courses furnish as a rule no specific professional training, but a large proportion of students choose their electives with a view to preparation for their future careers. In this they would appear to be neither more or less intelligent than other

people who talk about the matter. They seem to think chiefly of the acquisition of facts, and are continually asking whether the knowledge of such and such a subject is not valuable in a certain profession. Now, knowledge vanishes away, but mental training, habits of thought and methods of looking at the problems of nature and man endure. Fortunately, students are usually unable to gratify a desire to acquire facts that will be useful to them in their subsequent career, and, indeed, have somewhat distorted notions about the class of facts that will be valuable to them. They are continually asking whether the knowledge of American history is not very useful to a lawyer. From the point of view of business success it is probably not as useful as a familiarity with literature, or with mechanics; but the training it gives is of inestimable value to a lawyer, whether he remembers the chronological order of the presidents of the United States or not, not because the methods of thought in history and law are the same. On the contrary, they are very different. The process of reasoning in law is perhaps more purely deductive, than in any other form of mental work in which a large number of men are habitually engaged at the present day; whereas history stands very nearly at the opposite pole of thought. It is, indeed, partly because the methods of thought are so different that history is not a bad thing for a lawyer to study. A man who has specialized in college in one line, and in his professional school in a very different one, has not a bad foundation for an education, whatever else he may or may not have done. Moreover, the training that a student in history gets in weighing evidence, in the use of sources, and generally in the method of historical research, is of great value to a lawyer, or, for that matter, to a man who pursues any other career. The training that a lawyer would get in the study of literature or natural science would be valuable also, and I shall return to this point in a moment. In general, however, I believe that the students take their future career too much into consideration, and that it is a mistake to look upon college as a preparation for earning bread. In discussing education the whole world today seems a little prone to forget that a man has a soul as well as a pocket, and that the two are not necessarily filled by the same process. No doubt a college education does, by broadening a man's capacities, make him in the long run far more effective as a bread winner, but it is chiefly because he has a soul that the existence of colleges as distinguished from professional schools is justified.

We are said to live in a material age, where the ruling passion is the love of money; but this is hardly fair to ourselves. Every age has the defects of its qualities. In mediæval times the ideal of life was transcendently high, but it was not thought necessary that the great mass of men should attempt to conform to it. There was a gulf between theory and practice, which no one but the saint bridged.

There was a sharp contrast between the ecstasy of the beatific vision and the barbarism of the world. Today men demand the carrying out of professions. They demand that people shall live up to their ideals, with the result that the actual life is far more humane, and perhaps the ideal is not so high. We live not so much in a material, as in a practical age, where the thing which we demand, and the test which we apply is efficiency; and in the case of efficiency, as in other things, money comes to be regarded as a measure of value, and therefore as a test of success and the aim of ambition. Now, just as the monasteries, and the universities that grew out of them, held up a light in a dark world, so it is one of the most important functions of our colleges to hold up an ideal in a practical world. Not that there is anything wrong or improper in the consideration of future utility in a college curriculum, but it is a misfortune that it should to the extent that is now true crowd out considerations of a higher nature.

There is another common motive for choice which is not recognized by the students themselves, for only two out of the seventeen hundred spoke of it: it is that of fashion. Since the elective system was introduced the large courses have not only grown very much in actual numbers, but they have even increased in proportion to the number of undergraduates. In the year 1872-73, there were nineteen elective courses which contained one-fifth or more of the class. As the system progressed, and the number of electives offered was increased, one would naturally expect to find a smaller proportion of the men in each course, and hence a smaller number of courses that contained large fractions of the class. This was at first true. In 1882-83, there were only fifteen courses that contained one-fifth or more of the class; but then a change began. In 1892-93, the number of courses containing one-fifth of the class had increased to twenty-five, and one of them was taken by four-fifths of the students. In 1901-02, the number of courses that contained one-fifth or more of the class had increased to twenty-seven and a half, of which two were taken by four-fifths of all the students.

Now, when a flock of sheep turns and runs in a mass across a field it may be that one motive acting independently upon a number of rational minds produces simultaneously in them all the same conviction, but that is not the usual explanation. The truth is that the elective system, like the doctrine of *laissez faire*, and like the whole political philosophy of the seventeenth and eighteenth centuries, assumed that a man was strictly a rational being, whereas in fact he is mainly an imitative animal. His actions are only partially deliberate, and are in the main governed by habits, traditions and suggestions over which he has, in fact, little control.

This brings me to another question, and that is whether any great wisdom is required to make a useful choice of electives. It is easy

enough to teach a dog to pick out the ace of spades from a number of cards laid face down on the floor, if everyone of them is an ace of spades. Now a proper distribution of a man's studies, his attitude of mind toward them, and the methods in which he studies them, are of the utmost importance; but what the particular subjects are is a matter of far less consequence, whether we regard his own mental development or his preparation for a subsequent career. This may not be equally true of all professions, but it is certainly true of most of them. In my own class in the Law School there were men who had distinguished themselves in classics, philosophy, history and mathematics. These men all had a great initial advantage over those who had had no severe mental training of any kind, but they showed no marked advantage in preparation over each other. With the increasing range of human knowledge we may today define a liberal education as knowing a little of everything, and something well, and it makes no great difference what that something is.

We have been dealing with the results of the elective system so far as the actual choice of studies is concerned, but the moral aspects of the system are certainly of not less consequence. The moral effect on the instructor has been, as far as I can see, entirely beneficial. It has made him feel that he is to his pupils more of a guide, philosopher and friend, and less of a task-master. The fact that he can say to a slothful or reluctant pupil, "If you do not like this course, you need not take it. You can find something you do care for," puts him in the right relation towards his students, for he assumes that they are interested in the subject. Moreover, the system makes it possible for him to give highly advanced courses to the few pupils who are prepared to follow him. No doubt this is true, in any case, of a graduate school, but the elective system gives to the instructor in the college much the same position that he has in a graduate school.

The moral effect upon the students has certainly been less widespread than was hoped, although it is hard to tell with precision how many students have been stimulated by it. In response to the circular of the Pedagogical Seminary a few years ago, sixty-two per cent. of the recent graduates who answered, said that the elective system had promoted strenuous work; six per cent. said it had undermined it; seventeen per cent. that it had done neither; while fifteen per cent. were doubtful. But, in considering evidence of that kind, two things must be remembered: first, that only a very small part of the men to whom the circular was sent answered at all, and presumably that part consisted in large measure of those who held decided opinions; and in the second place, these men were comparing a system they had known with another at which they could only guess. One of the arguments formerly adduced in favor of free elective courses was that

young men who were incorrigibly indolent in college suddenly experienced a change of heart, and worked furiously when they entered a professional school. It was hoped that they would do the same in college if they could choose their own studies, but this type of man has not disappeared. He is still with us, and unfortunately far too common. He keeps above the minimum line required for his college degree, but he does not find in the elective pamphlet anything of really absorbing interest, nor does the privilege of selecting his own line of work fire his imagination. Owing to the habit that I have already deplored of estimating college studies too exclusively by the value of the facts imparted, and by their visible bearing upon a future career, he does not appreciate the true meaning of college, or its value to himself. Too often it seems to him an interlude, a sort of holiday, and not an integral fragment of his life that moulds his character and shapes his intellect.

A survey of the results of the elective system after nearly a generation of experience, would, therefore, seem to show that it has not led us to perfection and certainly not to disaster. In some form it was inevitable; but it has wrought no vast change for good or evil in the human nature of undergraduates. It has done good, and it has defects, but although some of those who have had experience of it may desire to modify its working in details, probably no one at Harvard would now think it possible or desirable to return to an earlier state of things. Much of what I have said in the form of criticism is, I presume, equally true of every form of college curriculum, and is not the product of any one system. Are we not, in fact, mistaken in expecting great moral results to flow from merely imposing or removing restrictions? Whatever may have been true in earlier days, have we not reached a time when we cannot rely for the moral and intellectual tone of the undergraduate either upon rigid discipline or upon his own impulses? Is it not true that throughout the length and breadth of our land the ordinary college man is less deeply in earnest in his work than the student in a professional school? Is it not true, also, that in our colleges athletics appeal far more forcibly to the imagination of the student than scholarship; and that the successful athlete is incomparably more of a hero than the scholar? Is not this so true that we assume it must be so in the nature of things? And, yet, is there any intrinsic reason why men should take more pleasure or pride in the exercise of their muscles than in that of their brains, or should hold physical triumphs in so much greater honor than intellectual ones?

I would not deprecate the use of athletics, or the value of the enthusiasm they create. They are a healthful spring of energy and should not be discouraged, but have we not suffered them to monopolize the interest of students too much? Have we not allowed the publicity of the newspapers, and of the crowds cheering on the bleach-

ers to distort in the minds of students the proportion of things? And have we not been ourselves misled by our discussions about the curriculum, to allow too much the moral and intellectual welfare of our students to take care of itself? Ought we not to make greater use of the fact that man is an imitative animal, a creature of fashion, and create a higher intellectual tone by getting hold of the natural leaders, and starting them to set the pace aright? The cowboy knows that although he must urge on the lame and lazy steers, it is an unkind and thankless task, and that the real progress of his herd depends upon starting the leaders betimes where he would have them go, well knowing that the whole herd will follow. Is not a part of our problem to be solved in the same way, not by formal systems, but by imparting to the stronger man in each class a truer conception of the real meaning and privilege of college life, and thereby make the ordinary student attach greater esteem and honor to scholarship and intellectual power? But this raises a large question quite distinct from the subject of this address. I wanted merely to point out that just as neither *laissez faire* over commercial regulation has changed the nature of man, so no system of arranging college work can revolutionize the character of students; that for moral effects we must rely mainly on moral agencies.

THE HISTORICAL MEETING
THE CHAPEL, 4:00 P.M.

PROGRAM

The President of the University Presiding

GENERAL THEME: The Recognition of Those Who Have Rendered Distinguished Services to the University.

Music: University Anthem; University of Illinois Men's Glee Club.

Introductory Address: The President of the University.

Addresses on "The Builders of the University:" Professor Arthur N. Talbot, Class of 1881; Honorable Henry M. Beardsley, Class of 1879.

Music: Illinois.

Responses:—

For the Board of University Trustees, Honorable Emory Cobb;

For the Early Resident Trustees, Honorable Joseph O. Cunningham;

For the Senior Members of the Faculty, Professors Samuel W. Shattuck, N. Clifford Ricker, and Thomas J. Burrill;

Closing Remarks: The President of the University.

Music: Auld Lang Syne.

Benediction: The Reverend Professor Charles M. Moss.

THE OLD-TIME FACULTY OF THE UNIVERSITY OF ILLINOIS

ARTHUR N. TALBOT, C.E., Class of 1881

Professor in the University of Illinois

It would be difficult for one who sees the University of Illinois today for the first time, with its spacious buildings, its extensive equipment, its long list of students, and its numerous and varied interests and activities, to conceive of the institution as it existed twenty-five and thirty years ago. With one principal building, barely four hundred students, less than a score in the instructional force, and limited and inadequate financial support, the contrast with present conditions is striking. And yet there was a personality, a purpose, a promise, a character that attracted attention and commanded respect, and there were elements of virility and strength, of individuality and freshness that made for the development of manhood and character in its students. The newness of its plans, the very freshness of its methods appealed to the student body. The freedom permitted in the choice of studies was even greater than that allowed at the present day. The variety of courses of study offered and the extent and variety of the equipment of the school seemed quite wonderful to

students of neighboring colleges. Although the scholarship requirements for admission were not high, it must be remembered that the high schools of the State had not generally risen to their present grade and that it was a public duty to fit the educational requirements to the conditions of the time. A new type of education, a revolt from the old-time cast-iron classical curriculum, the introduction of laboratory methods, the appearance of "useful" studies as well as of culture subjects, the attempts to dignify labor and the starting of courses in technology, the very name Illinois Industrial University (a name which unfortunately was misunderstood and did not convey the high purpose intended),—these gave an individuality to the institution. If to these be added the enthusiasm for study and a reputation for earnest steady work in the student body, a general feeling among the Faculty that thoroughness and efficiency in instruction were essential, and a deep feeling that provision for higher education by the State entailed a duty upon the recipients to make good in citizenship and in loyalty to the interests of the commonwealth, we may trace something of the characteristics which apply to the institution of the present day.

It was the reputation along some of these lines which attracted many of the students. The feature of compulsory student labor had early been discarded, but instruction in the shops was being developed, the earliest of its sort in the United States. The laboratories were prominent in the interests of the institution. The military organization and the daily chapel convocation with its military arrangements were noteworthy features. But beyond the buildings and equipment and above the methods and plans, that which most impressed the student and to him gave character to the University was the personality of the Faculty. To the student of a quarter of a century ago it was the professors who constituted the University of Illinois. And this opportunity is here given to express an appreciation of the services of the men whom I knew in the early days.

It was nearly a decade after the opening of the Illinois Industrial University when I entered the institution. Of course the most prominent name was the first President, or Regent as the officer was then termed, John Milton Gregory. The halls were full of tradition of his oratory, of his wonderful ability, of the inspiration of his teachings and the vigor and keenness of his intellect. It was not my good fortune to have advanced far enough to enter his classes, but the reports of his teaching were enthusiastically commendatory. His strongest efforts lay in his chapel talks and public addresses. His interpretation of current thought and of the trend of events in history, sociology, and government, his exposition of conduct and character and his inspiration to high ideals in ambition and citizenship were helpful, inspiring, and character-developing. In fact it may be said

that one of the greatest accomplishments of his life was the stimulus, the imprint, the impulse given to the graduates of that early day, and this influence is yet apparent wherever those men may be found.

In educational lines he was a pioneer and a seer. Brought to the head of a new institution to develop and put into effect new methods, departures from the beaten path, his was both an opportunity and a responsibility. The lines of industrial education were to be developed, —in agriculture, in mechanic arts, in technology. Laboratories and laboratory methods were to be employed. Without discarding what was valuable in classical education, he outlined new courses and provided instruction which has since been accepted by the most conservative colleges of the country. His papers and reports on the educational plan and policy of the young university show an insight, a wisdom, and a broad-minded and intelligent conception of the possibilities of state universities, particularly along industrial, technical, and general lines. Surely it was a master hand that guided the University in the thirteen years from 1867 to 1880, and the imprint that he made will be visible as long as the University of Illinois exists.

But large as should be the credit given to the head of the institution, there were others who rendered distinguished service to the University throughout its developmental stage. The conditions of its growth gave the Faculty of the institution peculiar opportunities for impressing their personality upon the student body and for moulding the form and fixing the trend of the school which was to be unlike the college of the past. Not only did the smallness of the number of students make conditions such that the students became acquainted with each other through and through, so that there was no chance for pretense or false distinctions, but the opportunity was had and given for the student to come in contact with the professors and to learn to know them. This acquaintance and association was highly esteemed by the students, and its influence was an important element of their education.

One of the earliest of the names on the roll of the Faculty and one long in the service of the University is that of Edward Snyder, professor of modern languages, for many years colonel in charge of the military battalion, always known as the friend of the student. Throughout his twenty-six years of service to the University, his characteristic was his absorbing interest in the welfare of the student, and the pathway of many a student was smoothed and his courage renewed by the kindly attention of Professor Snyder. He was a friendly soul, and his helping hand and sympathetic heart were of even more service than was his work in the class room. His unswerving interest in student life is attested by his act in leaving the savings of a life time to the University for a student's aid fund to be loaned to worthy students to enable them to finish their courses in

the University. His death occurred in 1903. His memory will ever be revered by all students of his time.

The student of the long ago always turns pleasantly to the name of the Professor of Mathematics and Business Manager of the University, Samuel Walker Shattuck. His friendly greeting, his gentlemanliness and courtesy, the elegant carriage of his military bearing were lessons in themselves. Those who had the privilege of knowing him more closely, in the class room and in the home, gladly do honor to him as a teacher and friend. In continuous service since September, 1868, serving as head of the military department, as professor of civil engineering, as professor of mathematics, as Vice-President of the University, and as Regent *pro tempore*, his duties have been varied and many, but probably his greatest service has been in the management of the business affairs of the University. His uprightness and probity, his business sagacity and prudence, his loyal and firm control of affairs have contributed largely to the confidence placed in the University by the State. Changes in politics and political parties, in the governing Board of Trustees, and in the executive head of the University have not changed this controlling hand of the exchequer. No taint of wrong or charge of graft could ever be made against this office, and it is undoubtedly true that the model condition of the books and accounts of the business office from the beginning of its history, shown in the investigation made in all state institutions when a new political party took control of the State government in 1893, was a potent influence in securing aid from the State administration for the larger appropriations, and that when the University suffered from the defalcation of a treasurer the State Legislature had full confidence in the internal administration of the University's finances and increased the appropriations. It is no small task to handle the business of the University of Illinois today, and thirty years ago the work, though smaller in magnitude, was no less perplexing. The University owes Professor Shattuck a debt of gratitude for the fidelity and sagacity with which he has discharged this trust.

To us in other lines came reports of the inspiring teaching of a man of science, who has since had a leading part in the affairs of the University, Thomas Jonathan Burrill, professor of botany. The enthusiasm he generated, the spirit of delight in scientific study, the joyous pleasure in investigation, seemed contagious. He was perhaps the earliest of the men of Illinois to become noted as an investigator in science, and his early work in bacteriology was noteworthy. Who shall measure the sacrifice which he made in giving up his research work when it was white with the harvest for his hands alone and in accepting the duty of the hour by taking up the work of the retiring President? He had filled the position of Vice-President, and he undertook the duties and responsibilities of Acting-President and soon

generated the same enthusiasm and delight in the student body, the same spirit of vigor and life in university affairs, the same confidence and hopefulness in the public mind that had characterized the class room. Led by his guiding hand and inspired by his genius, the University bounded forward and started on its era of expansion. The three years of his administration (1891-94) were fruitful years. Growth in number of students and Faculty, increase in legislative appropriations, a new era in building operations, healthful student life, higher ideals of university work, the extension of the influence and name of the school, characterized this period. The institution was changing from a college to a university. The results of his energetic and wise administration were apparent everywhere. When he turned over his trust to the incoming president, all the conditions were auspicious for the continued development and expansion which time and wise and able administration have since brought about. The University owes much to Dr. Burrill for his able and efficient work. The alumni voiced their appreciation of his efficiency and loyalty and all friends of the University recognized the great service he had rendered. Later years have brought other valuable service, as Vice-President, as Dean of the Graduate School, and in various other capacities, until the measure of his accomplishment is overfull. Longest in point of service, having served continuously since the spring of 1868, full honor should be accorded to this beloved servant of Illinois.

It has been said that Illinois has been fortunate in the devotion of some of its alumni teachers. From the first class, the Class of '72, Nathan Clifford Ricker, chosen instructor in architecture in 1873 after a period of study in Europe, and appointed professor of architecture in 1877, is a conspicuous example. Although instructing unaided for the first seventeen years, he built up the architectural department of the University and made it early recognized as one of the principal schools of architecture in the country. In addition to this he carried the duties of Dean of the College of Engineering from 1878 until he gave them up the past summer. Modest and unassuming, industrious and painstaking, well informed and broad minded, he has held the esteem and love of his students to a marked degree. To his credit should be placed the introduction in 1873 of the Russian system of shop practice into the curriculum of the University, the first use it was given in a technical school in this country, though now almost universal. His writings too are numerous and noteworthy. Several buildings on the campus are the proof of his handiwork, and his influence upon the architecture of the State and upon the standing of the architectural profession has been beneficial. His ability and authority in architectural matters are quite generally recognized. He has worked diligently for the interests of the College of Engineering and

the University, and the results of his labors are everywhere apparent. In the history of the institution, the name of Professor Ricker must ever have a prominent place.

No student of his time would fail to mention the services of Selim H. Peabody. As a teacher of physical science his work was noteworthy. It was however as President for eleven years, from 1880 to 1891, that he claims distinction. Placed at the head of affairs when the University was in financial straits and when public opinion and legislative views were not favorable to public aid for higher education, he secured at the first session of the Legislature the first state appropriation for operating expenses, an item which has been included in every appropriation since, and which has grown to large proportions, saw the income of the University constantly increase and new buildings erected, and aided in changing the name from Illinois Industrial University to the University of Illinois, and in starting the Agricultural Experiment Station. During this period the University was put on a better footing in educational standards, in business and administrative methods, and in its relations with the school system of the State, and the University passed through the second stage of its development. The part taken by Dr. Peabody through this period of educational and industrial depression should be recognized as difficult and trying. Dr. Peabody was a man of high character, scholarly attainments, and unusual versatility, a prodigious worker, an efficient administrator, and an educator of recognized standing. His name must stand as one of the strong men of our University history.

Time will not permit a record of the work of others whose services deserve recognition,—of George E. Morrow, that pioneer of agricultural education; of Stillman W. Robinson, whose footprints are still everywhere visible in mechanical engineering; of Joseph C. Pickard, beloved teacher of English literature; of Don Carlos Taft, instructor in geology and morals; of Miss Lou C. Allen, now Mrs. J. M. Gregory, first teacher of household science, and whom the women of Illinois might well select as their patron saint; of Ira O. Baker, then young instructor in civil engineering, whose rare instructional methods and educational ideas are now known and have made the University of Illinois known wherever engineering science is taught,—the work of these and others deserves much fuller recognition than can be given here.

I have mentioned some of those I knew in my student days, though I have done scant justice to their deeds. They may not have built great bridges, or erected tall buildings, or managed great industrial operations, or governed a state, but they have sent out pupils who have done and are doing the world's great work for them, and they may justly accept the work of these hands somewhat as their accomplishments. Surely the results of their efforts are written on

the heart and lives and work of their students and on the form and texture and life of this great University they helped to build. The historian of the University of Illinois will record their accomplishments. Today let us recognize their worth and do honor to these men who have rendered such distinguished service to the University of Illinois.

ADDRESS

HONORABLE HENRY M. BEARDSLEY, Class of 1879
Attorney, Kansas City

This great University, with its history and its present equipment, has not come by chance. It had its beginning in an epoch-making time. It had then, and has had from that time until this, the thought and service of men of unusual ability.

About the middle of the last century the movement began for the bringing of higher education to those engaged in agriculture and the mechanic industries. Looking back to those times, in the light of what has come since, the men who were then the leaders stand forth like prophets. Foremost among them was Professor Jonathan B. Turner of Illinois College. For years he went back and forth across this prairie State proclaiming everywhere the necessity of the new teaching. At state fairs, at the meetings of educational bodies of every character, and among men in business life, wherever he could get a hearing, he was there to proclaim his cause. As the years went by, the circle of those who understood grew larger and larger, until at last Congress passed the act which made possible these great state universities, granting an endowment out of the public domain for them. Quickly following, the Legislature of this State passed the necessary legislation, giving life to this University.

On that day in March, 1868, when its doors were opened, there was present, taking part in the exercises of the day, Dr. Newton Bateman, then Superintendent of Public Instruction of the State, a man thoroughly in sympathy with the new movement. To Dr. Bateman, standing there, looking back into the past and reviewing the work that had been done, looking out into the future and giving voice to the hope that was cherished by all, Professor Turner seemed a great leader in the movement, and he so proclaimed him. It was not a narrow idea which had been his,—not simply the bringing to the farmer and the mechanic opportunity for education in his calling, for this would not, in his mind, of necessity have elevated the man. It was his idea that the university so founded should be broad and liberal in its teachings, recognizing the needs of all the manhood and womanhood of the State, bringing education and culture into every walk of life.

The years passed by, and we were met in the drill-hall yonder to celebrate the twenty-fifth anniversary of the founding of this institution. There were gathered here a great concourse of people. Professor Turner had grown old and blind. The paper that he had prepared for the occasion was to be read by his daughter, then a member of the Board of Trustees of the University. But, first, he himself was asked to stand, that he might be introduced to that proud audience. Near him at the time sat Dr. Gregory, the first President of this institution. His own thought of the past and the great present so over-mastered him that he arose in his place—those of you who were here will remember it well—and looking out over the audience exclaimed, "Look at him! Look at him! You will not see his like again."

One of the first acts of the Board of Trustees called together at Springfield, Illinois, in the early part of the year 1867, was the selection of a President, then named Regent, of the University. It required but a short time to select the man, and Dr. John M. Gregory was chosen. He had been educated as a lawyer, ordained as a minister; he had been a public educator, Superintendent of Public Instruction of the great state of Michigan, and president of one of its colleges. He was thoroughly in sympathy with the new idea. One of the first productions of his pen any curious student may find in the first annual report of the University, that of 1868. It was the report of the committee of which he was chairman, named to outline a course of study. Step by step a plan for the future was laid down, a plan which through the years since has been followed, only amplified and completed. And at the last, this report upon the college curriculum ended with an out-pouring of eloquent words like the closing words of some great oration. The writer could see through the years to come added dignity to agricultural and mechanical industry. To him there was being lighted a new light which should shine into the homes of all the people. And standing here today we must declare his words truly prophetic of the present and of our hope for the future. The work of the world must be carried on. It is not the province of education to lead men away from that work which lies at the very foundation of all progress. It must be increasingly true that men must find in this labor dignity and joy. It must be true, as declared by the great professor of constitutional law of the University of Switzerland, that in this life men ought to expect no higher happiness than that which comes from work well done.

And so he came, the first President, one of the great men of his day. How he moved among us, we of the older day know full well. We may forget the lessons of the class room, the facts of science which were taught us, the rules and theorems of higher mathematics, the intricacies of logic and philosophy; but the higher ideals in life, the

value of character in every enterprise, the elements which enter into and serve to make the highest type of manhood,—these things which were taught by him can never be forgotten. The University may multiply the number of its students, may increase the number and magnificence of its buildings, and as well all its material equipment, may broaden its curriculum and increase the facilities of education—and of these things we shall always be proud—but unless at the basis of things, through all the years, there shall lie the great principles of his teaching, the University will not accomplish fully the work it is set to accomplish. The need of the state is for the light which education brings into every walk and avenue of life. But most of all and always, she needs men and women; for the type of her social life and character, of her social existence, and even of her commercial and industrial life, depends upon the underlying character of her men and women, their views, beliefs and ideals.

He was one of those great men, calmly confident of a high and noble mission. He spoke as he did, like the prophets of old, because the truth demanded of him expression. I remember well toward the close of his life, sitting one summer afternoon talking with him. Those who were acquainted with him and heard him often know that there were few men of his time his equal as a platform speaker. Referring to the fact that there was great demand for public lecturers, he said that he had often been asked by those in charge of lecture courses for permission to place him in lyceum series for addresses in different parts of the country, but he said, "Thinking of the hundreds of boys and girls who had passed through the University when I was with them, and of the ideals I had tried to lift up before them, I could not consent that they should think of me as using what ability I had in this direction merely for pay." So through all the years of his life until the last, his intellect and his voice were at the service of those whom he felt he could best serve.

At the beginning he laid down the lines along which the life of the University ought to develop. His thought was far-reaching, his ideas were broad and progressive. They were to include here teaching in mechanic and industrial arts, teaching in literature and in the higher and fine arts. The whole field, and every part of it, was to be within the reach of those who came here as students. He was misunderstood at the first; he was opposed, and bitterly opposed, but with firm faith and great courage he held to his own ideals, and the triumph of the University is in large part the triumph of his work.

He was to us of those days, not alone the teacher, but the seer and prophet. Through his teachings we saw the things of life in their right relationship to each other. What was left, after his soul had taken its departure from the body, was placed yonder by the main building beneath a simple mound. As Tom Brown sat there at Rugby

that summer afternoon, with the light stealing through the painted windows, casting its color against the wall, himself leaning over the marble slab where they had buried the great teacher, Arnold, his heart overflowing, so we come and stand by Dr. Gregory's grave.

The days of the laying of the foundations passed. Dr. Peabody organized and established the work begun. The State grew in wealth and power. Her commerce and her industries multiplied. She needed a great university. There came, in the fullness of time, a man fitted for this task. Andrew S. Draper was not only a trained educator; he understood public affairs. He knew how to appeal to the legislators and to the pride and ambition of the citizenship of the State. No labor was for him too great; no part of his task so difficult, but that by skill and patience and with argument and appeal, he would win his way. Funds necessary for greater things were granted. The student body grew; the Faculty and teaching force multiplied, and within a few short years the University of Illinois had come to be one of the chief educational institutions of our nation. Turn away for a moment, if we can, from all these things that are about us today, and think of the conditions here a dozen years ago. Only so can we comprehend the changes which have taken place. The present is so fixed and certain, we easily forget how it was won.

To those who were of the student body in those days of marvelous growth, and many more of us who were not, Dr. Draper was more than the college president. His sympathies were broad, and he took interest in individual men. He came out from the university life from time to time into the meetings of alumni, bringing with him the enthusiasm and hope of the larger university life. He let us into the secrets of the larger things to come,—already planned for; and with all he won our hearts. We too knew when his affliction came—knew of the unflinching courage with which he met it, and felt him to be not only a wise president, a sincere friend, but as well, one of God's brave men.

The work which Dr. Gregory began and Dr. Draper carried on so well, has fallen now into other hands. We cannot doubt that there shall come here, without loss of moral fibre or firm administrative grip, that riper and richer scholarship which to the coming years is possible. These men who have wrought at the head of affairs have not worked alone. The University of Illinois could not have come to be what she is without these others. There are two or three here who have had a chief part in this work from the beginning.

There is one in whose person the memories of the University life more center than in any other. He used to teach of trees and flowers and bugs. We always felt his heart was close to nature's heart—yes, and close as well to the great beating heart of student life. It would not be at all like coming back to Alma Mater if Dr. Burrill were not here. One can scarcely believe the years have come and gone as

they have when one looks into his face and hears his greeting. He came out among us of the old boys and girls of the South West last year. His coming was like the coming of the south winds in the spring-time. Instead of the odors of grasses and flowers, he brought memories of the old days so mingled with the new that we felt ourselves not greyheaded men and women, but boys and girls again. He had us shouting college yells we had never known before. He was the same Professor Burrill as of old; only more so. He had known only a few boys and girls in our time—the old days—he had known thousands since. He was fresher and kindlier for it all.

We knew, too, of the things he had done. Of his discoveries in his own profession of which the scientific world knew. We knew, too, that through all the years of the life of the University, it was he who stepped forward to take command when the chief commander's place was vacant; filled the place with dignity and grace, and then stepped back into his old place as the new commander came. May he be spared for many years to come, linking the old with the new, beloved of the alumni from 1872 down into the years of the century just begun.

I saw today another, familiar to all who have been here, even from the beginning. His hair is whiter than of old, but his form is still erect, and he moves among the college men and women commanding respect by the complete, exact fulfillment at all time of his duty. In the class room and in all public places he has insisted upon courteous and kindly conduct, and has himself always exemplified it. Professor Shattuck has been, as well, a balance wheel in the conduct of the business affairs of the University. In these times when we are privileged to speak of those to whom the University owes much, we must place him among the foremost.

There is another who stands between us of the alumni and those others who have been governors and teachers. He is himself of us, among the earliest of the student body, first to step from that rank into the ranks of the teachers. Master of his own calling, he has always read widely in other fields. It has been gratifying to the student, in whatever college or department he may be carrying forward his study, to find in him companionship and a fund of information. He knew where further light could be had; knew always some advantage in understanding to be gained by side lights found in some other field of learning. In the college over which he has for years presided as dean, Professor Ricker has the respect of his colleagues. He has had the affectionate regard and admiration of the University students from year to year. We of the alumni delight to find him still here. He has laid many stones in the structures being here erected. He is now and shall be as long as he remains at his post, accounted among the chief of those who have guided and controlled, pushed forward and strengthened the University of Illinois.

But what a host there are whose names we could speak, and who have had large part here. We would love, if time permitted, to pay our tribute to those who from time to time have constituted our Board of Trustees; giving out of the midst of the cares of busy lives a generous part of themselves to a great work here being wrought out! Some of them like Bullard, Hatch and Armstrong bringing to the task the added impetus of love for the institution which had nurtured them, fine enthusiastic painstaking, far-seeing men and women all of them, from that first Board who held up their hands and swore they had not been and never would be guilty of duelling, down to those who today guide affairs and of whom no such thing has been even suspected.

And what shall we say of those who have been in chief power, those who have held under their control the sinews of war,—the executives and legislators of this State from the first until now? There have been battles fought for this University there in the legislative halls well worth recounting. And these also, governors, senators and representatives, shall have their place in our memory, and in our praise. And now that we are here in our own house, may we not name among the chief of them Henry Dunlap, of the State Senate, of Champaign County, of the alumni, of Illinois—our Henry!

Again I see those who have labored here as tutor and professor, Baker, Taft, Pickard, Snyder, Kinley, Forbes, Talbot, Parr and all the long line growing stronger in numbers, and standing without loss of zeal and devotion as the years have passed. These men have been not only teachers, fulfilling the task paid for, they have been as well university builders, and as such we give them our praise today.

And these are not all. That student body which has from year to year gone out from this place to take part in the world's work—they too have helped to create and to maintain a university sentiment. They are the exponents of the power here developed. There is to them no choicer task than to come here this day, and through their representatives express the debt of gratitude they owe, and again make pledge that their own lives shall, in so far as in them lies, bring honor to the University to which they owe so much.

Dear Alma Mater, and all these earnest, noble souls, you are not, cannot be forgotten.

"Still, o'er these scenes my memory wakes,
And fondly broods with miser care;
Time but the impression deeper makes,
As streams their channels deeper wear."

ADDRESS

THE HONORABLE EMORY COBB
Former Member of the Board of Trustees, Kankakee

During my summer outing in the Appalachian Range of the Alleghany Mountains, in old Virginia, at an old colonial hotel, whose register recorded the names of Washington, Jefferson and Monroe, and where the *Chicago Tribune* is a daily visitor, I noticed that the installation of President James was to take place in October. I promised myself the pleasure, health permitting, of being in attendance, not expecting, however, to take any part in the exercises. Upon the urgent solicitation of members of the Faculty, requesting a short paper as to the organization and early history of the University, and more especially as to its finances, I reluctantly consented.

As to its organization, it was founded by an act of the Legislature approved February 28th, 1867, which provided that the Governor should appoint five trustees from each of the three grand judicial districts of the State, one from each of the thirteen congressional districts, and that the Governor, Superintendent of Public Instruction, President of the State Board of Agriculture, and the Regent elect, (who should be chairman of the Board), should be *ex officio* members; making a total membership of thirty-two who should be a body corporate and have its management and control. It also provided that it should be located at Urbana, upon conditions mentioned in the following offer made by Champaign County:

"The undersigned committee appointed by the Board of Supervisors of Champaign County are instructed to make the following offer to the State of Illinois in consideration of the permanent location of the Illinois Industrial University at Urbana. We offer the Urbana and Champaign Institute buildings and grounds containing about ten acres; also one hundred and sixty acres of land adjacent thereto; also four hundred acres of land being part of Section 21, Township 19, Range 9, East; also four hundred and ten acres, part of Section 19, Township 18, Range 9, East, within one mile of the buildings herein offered; also the donation offered by the Illinois Central Railway company, of fifty thousand dollars worth of freight over said road for the benefit of the University; also one hundred thousand dollars in Champaign County bonds, due and payable in ten years and bearing interest at the rate of ten per cent. per annum; and two thousand dollars in fruit, shade and ornamental trees and shrubbery to be selected from the nursery of M. L. Dunlap, and furnished at the lowest catalog rates, making an estimated valuation of four hundred and fifty thousand dollars."

The members met at Springfield upon the Governor's call on the

twelfth of March to organize and take up the work. In passing, it may be well to call attention to the composition of the Board. They were from all parts of the State, for the most part unacquainted with each other. Many were in the sixties, a greater number in the fifties, some in the forties and two or three in the thirties. Sixteen of them were farmers, most of them horticulturists, one was a manufacturer, three were lawyers, three school superintendents, two college presidents, one clergyman, one physician, one merchant, one architect, two railroad presidents, one the Superintendent of Public Instruction, and the Regent.

As just stated the members were comparative strangers, the writer being acquainted with one member of the Board, Mr. M. L. Dunlap, of Champaign. The meeting was called to order by Governor Oglesby, who acted as chairman, and proceeded at once to the election of permanent officers, which resulted in the selection of Dr. John M. Gregory, of Michigan, as Regent. He, by the way, was known personally to but two or three members of the Board. W. C. Flagg was made corresponding secretary, O. B. Galusha, recording secretary, and J. W. Bunn, treasurer.

Two committees of five each were also named, one on the course of study and to suggest a Faculty, and one on finances. The Board then adjourned to meet in Urbana on the first Tuesday of May.

At the time appointed the Board met pursuant to adjournment, Dr. Gregory and twenty-two members being present. At this session two important matters came under consideration, that of finances and the course of study.

Our finances consisted of the Champaign County bonds and the land scrip received from the general government as an endowment, amounting to four hundred and eighty thousand acres of government land, which according to the enabling act of the State, could be located or sold as the Board might direct. Quite a number of the older members were in favor of selling it all at once at the best obtainable figures, their personal experience being that lands which they had owned and were conversant with at that time sold at from ten to fifteen dollars per acre, and that lands that we might locate in Nebraska or Minnesota would not be salable for many years. A majority, however, were of the opinion that at least half of the scrip should be sold at once and the balance held for future consideration, and that one hundred thousand acres should be located at once. A respectable minority begged for a location of two hundred thousand acres at least, contending that we could get along with the avails of two hundred and eighty thousand acres well invested, with the Champaign County bonds as a reserve fund.

At subsequent meeting the demand for immediate income was so great that four hundred and fifty-five thousand acres of the scrip were

sold for about three hundred and twenty thousand dollars, and twenty-five thousand acres located in Nebraska and Minnesota.

The other important matter that came up was the report of the committee on the course of study. We were the first college to organize under the Morrill act, which provided primarily that such branches of learning should be taught as related to agriculture and the mechanic arts, not excluding scientific and classical studies and including military tactics. We were without any precedents to guide us, and it was inevitable that there should be differences of opinion as how to best carry out the provisions of the act. The course submitted by the committee with some slight modifications was adopted with a strong dissenting minority, including some members who had been active in the passage of the act by the Legislature and in securing the donations of lands and bonds which determined its location.

This action of the Board was the cause of severe criticism by many throughout the State, who avowed that instead of teaching such studies as the act called for, we had simply set in motion another old fashioned classical college. The Northern Horticultural Society of the State, several members of which organization were also members of our Board, passed resolutions to that effect, and the State Agricultural Board was also dissatisfied and would have passed similar resolutions had it not been that several members of our Board were also members of that body and were able to prevent it. All of the denominational colleges and schools in the State, with perhaps one exception, and the normal school were anything but friendly. The members of the Legislature were more or less prejudiced against us and were loath to grant us the ordinary assistance provided for in the act.

As our college building was inadequate, the Board decided to ask of the General Assembly of 1870 and 1871 a main university building, submitting plans and specifications with an estimated cost of about one hundred and fifty thousand dollars. Seventy-five thousand was appropriated to commence the building according to plans. A large majority of the Board construed this act as an implied agreement that the next General Assembly would appropriate the additional seventy-five thousand dollars, or so much thereof as might be needed to finish the building.

A respectable minority were opposed to incurring any indebtedness beyond the amount actually appropriated. Bids were, however, called for and contract entered into for the construction of the building according to the plans and specification, and the seventy-five thousand dollars was expended on the building during the summer and autumn of 1871, leaving it about half completed.

At the meeting of the full Board in March, 1872, the question of

finishing the building by selling the Champaign County bonds for that purpose was brought up and rejected on the ground that it would be more easy to obtain the additional appropriation of seventy-five thousand dollars from the Legislature if the building were left in its incompletely state.

An executive meeting was called for May twelfth following and at that meeting steps were taken to complete the building by the sale of so many Champaign County bonds as might be necessary.

The Committee appointed by the Board (the Regent acting as chairman) to visit Springfield in the interest of the University at the session of the General Assembly in 1872 and 1873 made prominent in their askings the refunding by the State of the amount advanced to finish the building, about sixty thousand dollars, urging it on the implied promise of the former General Assembly. The Senate committee refused to recognize any such promise and a disagreement finally culminated in an open rupture and refusal to make any appropriation whatever.

At this juncture (not being a member of the committee) I received a telegram from a friend of the University at Springfield, saying that my presence was needed as the University was in peril; also another telegram from the chairman of the Senate committee requesting my presence. I complied with their request and upon arrival was met by the chairman of the Senate committee, and catechized in regard to what he conceived to be irregularities in the management of the University, stating that as matters appeared to his committee, they would be unable to give the institution any assistance whatever. My reply was that I was a member of the Board and as such held myself responsible for the acts of my fellow members, and refused to discuss in detail the alleged irregularities but stated to him that the records of the Board, the University being a State institution, were public records and at his disposal, and that he could probably obtain from them all the information he desired. I also told him that it would be a very serious matter should the General Assembly refuse to assist us. I also met the chairman of the House committee, and explained as best I could our needs. After investigations by both committees they passed the Reorganization act, carrying an appropriation of about forty-five thousand dollars for completing and furnishing the main building; and fifteen hundred dollars in aid of the experiments on the experimental farm. This act provided for a reorganization of the Board, stating that the Governor should appoint nine trustees, three from each grand judicial district of the State, who, together with the Governor and the president of the State Board of Agriculture, for the time being, were to constitute the Board of Trustees.

The new Board met and organized on July 10th, 1873, Emory Cobb, president; Edward Snyder, corresponding secretary; J. W. Bunn,

treasurer, the Governor and President Reynolds of the State Agricultural Board being present. During the winter of 1872 and 1873, our contractor, Mr. Gehlmann, became financially embarrassed and gave up his contract. The new Board took up the work, finished and furnished the building and had it ready for the winter term, our Acting-Regent, Professor Shattuck, and Professor Snyder rendering valuable assistance.

At the first meeting of the new Board Mr. Reynolds offered the following resolutions, which were adopted:

"Resolved that a compliance with the spirit of the law of Congress which provides for the establishment of agricultural colleges in the several states, requires that this institution be devoted, as a leading object, to imparting such instruction to its pupils as shall be necessary to the intelligent practice of agriculture and mechanic art, and instruction in other branches of learning, whether enjoined or only permitted by the aforesaid law, is to be regarded as merely secondary.

Resolved, that in establishing a curriculum, in selecting the corps of teachers and in the general policy as adopted, this Board of Trustees will adhere to the views expressed in the foregoing resolutions."

At the September meeting of the Board Dr. Gregory, having returned, was present. He cheerfully accepted the conditions of the new law, and was informed by the chairman that it was expected and desired that he should be present at all the meetings of the Board. Professor Shattuck was appointed business agent.

On December 10th, 1873, the new building was dedicated with appropriate exercises, Dr. Gregory, Governor Beveridge, Gen. Eaton, United States Commissioner of Education, Professor Turner and others making addresses. With our new building formally dedicated and with an attendance of between four and five hundred, we all took new courage and unitedly pressed on with the work.

At the annual meeting in March, 1874, the course of study was somewhat changed to meet the requirements of the new law and in accordance with the resolution of Mr. Reynolds, previously referred to.

At the annual meeting in March, 1876, the Regent's report contained the following:

"It is gratifying to know that the University has at last surmounted the hostile and injurious criticism which so hotly assailed it in its earlier years and did so much to injure its proper growth."

It was the policy of the new Board and of the Faculty to do all in their power to win public favor, and to attend strictly to the aims and wants of the University, the Board going so far in that direction as to request the Faculty not to participate in any political controversy, by speech making, correspondence, or otherwise, which request was cheerfully complied with. We also kept the school of mechanical engineering well to the front, sacrificing other departments at times to further its requirements with highly satisfactory results.

At the June meeting, 1880, Dr. Gregory tendered his resignation, which was accepted. Dr. S. H. Peabody succeeded him and entered upon his duties at the commencement of the fall term in September. He was not a stranger to the Board nor the University, as he had occupied the chair of mechanical engineering during the years of 1877 and 1878, and was at the time of his appointment connected with a college in New England. He took up the work enthusiastically and proved an able executive officer. His appointment was well received by the industrial classes of the State, he being one of their number. His administration was conservative. One of the first things he did was to bring the high schools throughout the State in touch with the University by making them accredited branches.

The Legislature in the meantime became more liberal in their appropriations. The name of the University was changed from the Illinois Industrial University to that of the University of Illinois. The State Laboratory of Natural History was removed from Normal to Urbana and made a department of the University. At the December meeting in 1887 the Experiment Station was organized, and a board of control was created for its management. This board included members of our Faculty and representatives of the State Agricultural Society, the State Horticultural Society, and the Illinois Dairymen's Association, and members of our own Board.

In 1890 Congress passed an act for the benefit of the Land Grant colleges established under the act of 1862, ultimately giving twenty-five thousand per year to each college established under the act. At a previous session Congress had liberally endowed the experiment stations connected with such colleges.

At the June meeting 1891 Dr. Peabody resigned and Prof. Burrill was appointed Acting-Regent. He served as such until the appointment of Dr. Draper, in 1893.

My term of office as Trustee of the University expired in March, 1893, having served continuously since its organization in 1867 under the appointment of the several governors of the State during that time.

I shall ever cherish the pleasant associations connected with that service, and more especially my associations with the first members of the Faculty. They were loyal and true and worked faithfully under the most adverse circumstances for the interest of the University. On account of the state of our finances, we were obliged at one time to temporarily reduce salaries ten per cent., which they accepted without a murmur.

I will close by assuring the newly installed President and all connected with the teaching force of the University that they have the best wishes of the few surviving members of the original Board for their success in carrying forward the great work committed to their charge.

ADDRESS

JUDGE JOSEPH O. CUNNINGHAM
Former Member of the Board of Trustees, Urbana

Amid all these festivities over the inauguration of a new President of the University, the tendency of which is to turn attention to the present and future, a look backward is contemplated by the convocation of this hour, which should not be without its benefits, however much the present and future may engross our attention.

The University of Illinois, and its kindred institutions as well, owe their origin and distinctive character to the needs of society for educated hands as well as for educated heads, which was felt by a few half a century since. Then engineers, architects, chemists and agriculturalists were, with no view to scholastic preparation, taken from the ranks of practical men; and while good engineers, architects, chemists and farmers were generally the result, it took too long and cost too much to get them. The schools of that day educated men away from these practical and necessary callings rather than to them, and the so-called learned professions greedily claimed the lion's share of their output.

Practical men, not theorists merely, saw the one sided error of educating the head and not the hand also. The demand of a few far seeing Illinoisans, met together in an obscure Illinois town, for the education of the hand as well as the head, after a few years of agitation, became the demand of the nation, and Congress enacted the same into a law providing for the "endowment, support and maintenance of at least one college (in each state) where the leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts." The object to be attained by this new departure was by the statute declared to be "to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life;" surely then a new departure in educational matters.

In practice this University was one of the first to be organized under this law, as it has been one of the most successful; for in less than six years after the approval of the law by the President of the United States, and as soon as the condition of peace in the country would permit, it was launched by our Legislature.

No beaten track lay before it for its guidance and no successful precedents presented themselves to be followed. No enlightened public sentiment stood behind it to prompt financial aid. Divided sentiment among its friends as to the policy to be followed darkened counsels and added to the confusion. On the one hand were those who clamored for a policy narrowed down to instruction in those pursuits which related to practical agriculture and the mechanic arts

and that too without any preparatory scholarship other than such as was to be had in the common schools of the country, then none too good. The metropolitan press lent the powerful aid of its columns to this claim, and not satisfied by such advocacy, it aggressively threw in the way of the management of the University every obstacle at hand. So, an opposition which had grown out of the location, in an out of the way part of the State, of the institution, for a time joined hands with this faction, making the enemies of the University, entrenched as they were within the Board of Trustees, almost too formidable for its feeble strength.

A Board of Trustees of thirty men, chosen, it was feared, more with reference to future political movements than for their personal fitness for the organization and management of the new institution along untried educational lines, was an embarrassment for seven years and until its numbers were reduced to nine.

It is remembered too that the free school system of Illinois was then in its infancy, not having accomplished its first ten years of service. No high school then as now prepared the ambitious youth of the State for admission to college classes, and the first recitation heard within the walls of the University was a class in algebra, and that to the then President of the institution.

Added to all these hindrances, the name given to the new University by its charter, from the first imposed embarrassment and gave its friends plenty to do in explaining the fact that it was not a penal nor reformatory institution.

Out of all this confusion of counsels and conflicts of factions, under the able and experienced labors of the first President or Regent, John Milton Gregory, to whose memory be all honor, and whose labors were constant and untiring for thirteen years, supplemented as they were by the wisdom and work of his able successors and a hard worked Faculty, came what we behold today a university admitted by those who know how to judge of its merits to be second to but few of the great institutions of the Republic or of the world.

The time allotted is too brief to permit a willing and deserved tribute to all who have by their devotion to the University helped to make it what it is today, but among the numbers outside the Faculty who by their counsel and wisdom have rendered distinguished service should be named the Honorable Newton Bateman, for many years Superintendent of Public Instruction for the State of Illinois, who with Regent Gregory and others at the second meeting of the Board of Trustees, held in Champaign on May 8, 1867, rendered the report upon Faculty and Course of Instruction. The committee it may well be said, "builded better than it could have known," for a reference to that distinguished document will convince the reader that, as to the future of the institution it contained words of real prophesy.

Whether intentional or not on the part of the successors of Dr. Gregory and the Board of Trustees, it would seem that this document has been the chart and guide of all administrations for almost forty years and during the marvelous growth of the University. It is safe to say that this document, drawn by Gregory, has been the safe guiding star to which success may be traced.

Rev. Dr. J. C. Burroughs, a member of the first Board, although at the time president of the Chicago University and interested in its success, brought to the discharge of his duties the wisdom acquired by his years of experience with educational institutions, and contributed greatly to success. So of General Mason Brayman, S. S. Hayes, Honorable Horatio C. Burchard and John M. Van Osdell, all of them ripe with experience, devoted it to the work of the University. Perhaps of the greatest value to the University were the labors of Emory Cobb, Esquire, of Kankakee, who, appointed upon the first Board, continued to hold office until succeeded in 1893. An experienced financier before then, his counsels when followed, carried the finances of the institution over many a rough place, and when disregarded, as they were sometimes, the University suffered.

These early friends of the University, where yet in life, as few of them are, must look with great pride and satisfaction to what we see and hear today. To them and to their coworkers be all praise for what has been accomplished.

In these festivities the names of those gentlemen, members of the General Assembly, who from the inception of the University, have, as local representatives, yielded to it their influence and agency in securing financial aid, should by no means be forgotten or omitted from prominent mention. Hon. Clark R. Griggs, now of the city of New York, was a member of the lower house in 1867, when the charter was granted, and by his wisdom and legislative experience, aided in laying the foundation of the institution. He was afterwards a member of the Board of Trustees, where he exerted a strong influence in its management. Hon. John W. Scroggs, a member of the first Board of Trustees, was elected a member of the lower house in 1868, and was instrumental in securing for the University the first appropriation given for the erection of buildings. Hon. J. C. Sheldon was elected to the House of Representatives at the election in 1870, and as a member of the Senate in 1872, where for six years he was able to serve the institution by securing the appropriations which constructed the main university building. Hon. James S. Wright was elected to the Senate in 1880, and for four years ably represented the interests of the University, securing for it further recognition by the legislative branch of the State government. Hon. Martin B. Thompson succeeded Mr. Wright in the Senate, where his influence well served the University, especially in securing the change of name which relieved it from the

suspicion of being one of the reformatory institutions of the State. Hon. Milton W. Mathews was, in 1888, elected the successor of Mr. Thompson, where for four years he likewise was a faithful and efficient friend of the University, securing the appropriation which constructed the armory. Following Mr. Mathews as a member of the Senate came Hon. Henry M. Dunlap, who, now serving his fourth term, has, by his long service and loyalty to his Alma Mater, been able to accomplish much for the University in the way of larger appropriations for current expenses and for new buildings.

These gentlemen, all local representatives, have at all times been well supported by their colleagues from the local district as well as by other friends of the institution and of the work it has accomplished in the General Assembly.

ADDRESS

SAMUEL W. SHATTUCK, C.E.

Comptroller and Professor in the University of Illinois

I thank the gentlemen for their very kind words for me I trust the recording angel has taken note of them and that when my balance sheet is written up I shall have full credit for the same.

My first connection with the business operations of the University was in the summer of 1871 when I was appointed superintendent of construction for this building and the military and mechanical one then being erected. This position I held until class instruction began in the fall.

In March, 1873, Dr. Gregory, Regent of the University, was given a leave of absence of six months for a much needed rest. Upon his recommendation I was appointed Acting-Regent for the time of his absence.

Under the original organization of the University the Regent was president of the Board of Trustees and the business of the University was conducted by him. These duties I performed in addition to teaching three hours each day. Those were strenuous times for me.

In July of that year a new organization of the University went into effect. This relieved the Regent from the business operations and from acting as president of the Board of Trustees. Mr. Emory Cobb was elected to that position, which he held for many years with honor to himself and great benefit to the University.

Professor Edward Snyder was recording secretary of the Board at this time, which position he held till 1888 when William L. Pillsbury was appointed recording and corresponding secretary.

Professor Snyder came to the University in 1868 and was for twenty-eight years a beloved and respected member of its faculty.

In September, 1873, when Dr. Gregory again took up his duties as

Regent, I was put in charge of the business of the University; this position I have held since. I have also been the head of the department of mathematics for thirty-seven years. In this connection I cannot refrain from speaking of an incident that happened in 1869.

In that year when the ground on which this building stands was part of a corn field, I was surveying the field for the purpose of tile drainage, when one of the iron pins used was lost. I told a young man to get a wooden one by cutting a sprout from a clump which I had noticed, but to leave such as were not needed as they would be trees some day. At least two were left, and form today the large double hackberry tree on the north side of the walk in front of the Library Building.

I have looked at this tree many times, and thought that it represented my duties in the University, those of a professor and those as business manager. I have often spoken of it as my tree. Dr. Burrill has his avenue; I am satisfied with a tree. But it is the only one on our grounds not planted by man. It is not as symmetrical as many, but I trust it will be allowed to remain a long time yet.

In 1893, as one of its members expressed it, a new element appeared in the Board of Trustees. This element called for the resignation of the treasurer, John W. Bunn, who had well served the University for twenty-six years.

A new treasurer, Charles W. Spalding, was elected who served for four years and was defaulter for all the current funds, and the greater part of the endowment of the University. The business office for four months was under a severe strain to meet the current obligations, but through the wise guidance of President Draper and the powerful help of Senator Dunlap the University was put upon a better financial basis than it had ever been before.

The business operations and resources of the University have increased in as great a degree as has the number of its students.

At the meeting of the Board of Trustees in March, 1873, Mr. Emory Cobb, chairman of the committee on finance, made a report in which the estimated resources available for the year 1873-74 amounted to \$43,825.87 and the estimated expenditure for the same time as \$42,560.

The estimated resources for the year 1905-06 amount to over one million dollars. One million dollars may be expended, leaving a balance July 1, 1906, larger than the entire income in 1873-74.

DEVELOPMENT OF THIS UNIVERSITY

NATHAN C. RICKER, DR. ARCH.
Professor in the University of Illinois

Professor Morrow sometimes jocosely said to his intimate friends, "Tell me all that you know in five minutes." Similar would be any attempt to adequately discuss the development of this great University within the limits of the time assigned me. There is merely opportunity for some brief notes on its origin, with a glance at its present and its future.

The origin of this institution was primarily due to strongly felt doubts of the real worth and utility of the educational training formerly imparted in the colleges of the olden time. This was usually restricted to the ancient languages and literatures, almost ignoring the pure and applied sciences, then in a crude condition and not reduced to a systematic discipline. College equipment rarely existed, excepting the indispensable buildings, library, and a very limited chemical and physical apparatus for class room demonstrations. Graduates were almost compelled to enter one of the three professions, then recognized as learned. The public schools were believed to supply all the knowledge required by the farmer, gardener, mechanic, and even the surveyor.

Under the leadership of the late Professor Turner of this State, agitation arose for the proper education of young men not intending to become physicians, lawyers, or clergymen, to better fit them for life's vocations and for good service to their fellow men. This eventually led to a munificent grant of public lands by the national government and the establishment of the Land Grant universities in each state. These were then designed to train men, and later women, for the practical pursuits, to which much the larger part of mankind must always be devoted. It was intended to make their labors in the fields and shops more efficient and productive, both as workmen and as leaders of the industrial masses. For this idea was later substituted the production of teachers of applied science, chemists, architects, and engineers of all kinds, leaving the training of artizans to special schools and to apprenticeships in shops and manufactories.

President Gregory was a graduate of a small classical college, with later experience as clergyman, state superintendent of schools, and president of a very small college. He seems to have had no previous opportunity to acquire any deep interest in any one of the sciences or in their application. But the outline scheme of organization of the future university was drawn up by him, and it may be found in the first volume of the Trustees' reports. He had no precedent in any similar existing institution, little acquaintance with the details of

education in the sciences, or practice in their application, in architecture or in engineering. Nor had he any prescience of the marvelous material growth of this State, or of its future interests and resources, to be most intimately connected with this institution. Yet he produced a wonderful work in the plan of the University, an outburst of genius guided by common sense.

The main lines then laid down by him have scarcely been changed in later years, excepting in case of a profession based upon scientific discoveries then unknown, as in the case of electrical engineering.

One would naturally suppose that a new university of such a practical character would at once be thronged by students preparing to become scientific farmers, chemists, and practicing engineers. But it was strongly opposed by conservatives and by industrial leaders, who believed that university graduates were a kind of "horned cattle," dangerous until their collegiate training had been forgotten. Engineers continued to assert that the only sure foundation for the training of future engineers was to wield the axe and carry the surveyor's chain. Farmers were scornful, while land was cheap and careless farming was profitable, asserting that scientific agriculture could only be learned in the fields by personal toil. They long opposed the institution, claiming that the instructors were mere theorists. But when the value of land had so risen that a better system of culture became imperative, they found increased profits in following the advice of the formerly despised scientists. For years the farmers and gardeners of this State have been most loyal and appreciative supporters of this institution. Indeed, the present danger seems to be that they may eventually expect impossibilities to be made possible by the University.

The institution was opened thirty-seven years since, with a president, a few professors, and seventy-five students. A single large building on the north end of Illinois Field contained the entire educational plant, and it at the same time served as a dormitory for most of the students. There were then no shops or laboratories, no gymnasium or armory, no fraternities or athletic sports, nothing that now makes university life attractive or endurable for the average student. The equipment consisted mainly of a small library and a very limited outfit of chemical and physical apparatus. The student was required to contribute two hours of daily unpaid toil for the improvement of the grounds in order that he might learn something of agriculture and gardening.

The entrance examinations were very easy, for forty-two high school credits would at that time have been thought an impossible requirement, only to be realized in a different century. Moreover, four years of military drill were demanded, even from men who had served as soldiers during the Civil War, then just closed.

But the students worked diligently, perhaps because there was

nothing else to do on a prairie a mile from either city. No distinctions then existed between them, for all were alike freshmen, and class organizations were only formed much later with difficulty and little enthusiasm. Class hazing and the color rush are recent innovations.

From this primitive period not a single building now remains, only two of its original possessions being retained by the University, its endowment lands, and Dr. Burrill, its honored Vice-President. Most of the noble trees which grace the campus were planted by students during its first years, but they left no other memorial, save the fame won by their later work.

My own personal experiences as a student in the institution commenced with 1870, when I found one hundred and forty students in attendance, with some additional instructors. Professor Shattuck still taught mechanics, materials, and surveying, in addition to his chief work in mathematics. Professor Snyder taught all German, French, bookkeeping, and military science; was also commandant of the regiment, secretary and bookkeeper of the University.

Professor Robinson commenced his labors here at the time as professor of mechanical engineering and physics. He was the first regular instructor in the College of Engineering, and also its first dean. He was a tireless worker, day and night, and apparently had deeply studied every subject pertaining to any branch of engineering, was an expert mathematician, and he earned well deserved fame by opening the first shop in this country connected with an educational institution for the practical instruction of mechanical engineers. During his leisure moments he also taught civil engineering, materials, and made numerous inventions.

Few textbooks then existed in engineering, except those of ancient date, instruction by lecturers was a slow process, practicing engineers were too busy to write, blue-print and mimeographic copying processes were still unknown.

Some of the older students still cherish the memories of the Chicago campaign in 1871, of three companies of students, which then formed the sixth regiment of Illinois state troops. When ordered to load with ball cartridges and stationed as sentries, they certainly met with real service.

Professor Webb came later to open the department of civil engineering, devoting his entire time to its specialties and establishing a reputation as a mathematician, with some eccentricities. Civil engineers of that time still remember him as the author of the "Bagdad" lectures on geodesy. He had the first blue-print copies of lecture notes made, an idea which was largely developed later, and which soon greatly enriched the courses of instruction in the College of Engineering, extending its reputation among engineers.

The department of architecture came next, practically established

in 1873, with a half dozen students, few books and no equipment, among very unpromising surroundings for its purposes. But it first imported the Russian system of shop practice instruction in 1875, which is now universal, and much later established the earliest professional course in architectural engineering in the United States.

As a few specimens of the product of the College of Engineering during the early period, I may mention Col. J. A. Ockerson, Professor I. O. Baker, President-Trustee S. A. Bullard, and Architect C. H. Blackall.

The department of municipal and sanitary engineering was opened much later by Professor Talbot, in addition to his chief work in mechanics and in the development of the testing and hydraulic laboratories.

Electrical engineering was established by Professor S. W. Stratton, now director of the National Bureau of Standards. It at first occupied a portion of the main hall beneath the university chapel.

From these rudimentary beginnings has grown the present College of Engineering, with its sixty-five special instructors, its thousand students, magnificent buildings and equipment costing at least three-fourths of a million dollars, and its seven four-year professional courses, offered without charge for instruction. Its graduates are assured of good positions with increasing salaries, the supply of competent men never equalling the demand for them, so that it has become very difficult to retain the best graduates as instructors.

Under President Peabody occurred a period of slow, but solid growth, with a steady elevation in the quality of instruction, a time of foundation building.

This University was at first a scientific academy, then a small college, differing from the old time college only in the substitution of scientific for classical studies. It grew very slowly for twenty years, in consequence of cheap land, conservative opposition, diminishing income caused by the lessening rate of interest on investments, together with small aid from the State.

The change from a small college to a real university actually occurred but fifteen years since, under the wise and energetic administration of Dr. Burrill, as Acting-President, although this fact is obscured by its marvelous extension and growth later, resulting from the great executive skill, experience and foresight of President Draper. He consolidated the great edifice on the eternal foundations required for a great and permanent university. During his administration, the number of students doubled biennially by increase and by affiliation, and it is reasonable to say that its public importance and value grew in like proportion. It has become the undisputed leader in this State in most branches of education, without interfering with the good work of other state and private institutions. Far removed from their

former disbelief in its utility, Illinois farmers now expect it to solve the economic problems of modern agriculture by improving the useful plants and animals, by better methods of culture, by preserving the fertility of the soil, and especially by instruction in making every acre do its utmost in contributing to the comfort and welfare of mankind.

The casual visitor to the University sees its magnificent and well kept grounds, its numerous buildings, and the groups of busy students hastening from class to laboratory. Perhaps he enters a few buildings, sees a class room, a library or a shop, but he gains no knowledge of the University as a whole, and of its numerous activities. It is probable that the residents of the two cities know less of the University than of the clock factory, or of the new fair ground. Even its students have little acquaintance with colleges other than their own, and its instructors scarcely remember each other's faces. Certainly the public can have but the slightest knowledge of its work and of the opportunities offered to students. To make it fully known to the people of the State is a great problem, not solved by the insertion of advertisements in journals. To calmly await the fame earned by its graduates is too slow a process for this century.

Four thousand students in the University of a state containing five millions of people is but one to twelve hundred and fifty persons. This is certainly not a maximum ratio, but one that may be increased especially while the value of land continues to rise and opportunities for untrained and uneducated men occur less frequently in future. Success for young men without capital will require a more complete and lengthened educational training.

The University of Berlin was founded about a century since, and it has become the largest and leading university in the world. It does not comprise a faculty of engineering, as this is provided in a separate institution of full university rank, likewise the largest and most famous in its special field. Location in the chief city of Germany has certainly contributed much to the importance of both these institutions. But the available resources of the Prussian state and people will not always excel those at hand in rich Illinois.

If the population of the State continues its rapid rate of increase in future, it is reasonable to believe that it will be doubled at some future date, and that ten millions of people will be comfortably supported, when intensive farming is practiced thoroughly, and its natural resources and manufactures are fully developed. Crowded Chicago will then be abandoned for the smaller cities and the country, for the pursuit of vocations perhaps yet unknown.

The number of students in this University should then be doubled or it might increase to one person in a thousand. With ten thousand students in all its departments, this University might well aspire to be the best, the strongest, and the most useful in the world, as well as the

largest. Its supreme advantage over the college or university of the olden type is, that its endowment consists not of money, stocks, and like investments, but chiefly in the good will and public spirit of the people of Illinois, willing and anxious to provide the most useful and most thorough training for young men and women, without restriction by sex, creed, or race.

THREE ITEMS IN UNIVERSITY HISTORY

THOMAS J. BURRILL, PH.D., LL.D.

Vice-President of the University of Illinois

The growth of the University of Illinois has been, with slight regressions, continuously forward from the beginning. The momentum has varied greatly at different times but it has seldom decreased to zero and the resting periods, such as they were, have been more apparent than real. In the development from a small beginning it is inevitable that there should have been certain crises in the history, certain prominent happenings, which affected for weal or woe in each case the institution and its vital interests. I am now to speak of three of these and what came of them. They are selected with the clear apprehension that others might equally as well have been chosen for the purpose now in hand, but the builders who are mentioned should not be forgotten whoever else are left out in the recital.

I. THE FOUNDATION PLANS

Owing especially to the initiative of Professor Jonathan B. Turner and his coadjutors the people of the State had been aroused to the need of higher education adapted to the special requirements of people engaged in industrial pursuits, so that when the general government made its famous donation of land scrip in 1862 to the several states, individual opinions in Illinois were very pronounced as to what use should be made of the fund. But these opinions were very diverse. In fact no two were even substantially alike, if details were at all considered. While Professor Turner and his followers argued for the founding of one generously endowed and strongly manned institution in which real scholarship should be promoted, certain others contended for the distribution of the fund among the then existing colleges of the State, or among certain of them, for the establishment therein of departments to be devoted to practical affairs. Still others, and these were very assertive, demanded the establishment of a separate and distinctively technical institution solely for the agricultural interests.

When the matter came up in the General Assembly various attempts were made to settle by law some of these conflicting propositions, but the legislators themselves held decidedly too divergent views to make agreement possible except that there should be created

one new institution to be called the Illinois Industrial University and to this the whole congressional fund should be given. Other than this the only legal provision by which the first Board of Trustees were directed in determining what this institution should be or do is contained in these words:

"The Trustees shall have power to provide the requisite buildings, apparatus and conveniences; to fix rates for tuition; to appoint such professors and instructors and establish and provide the management for such model farms, model art and other departments and professorships as may be required to teach in the most thorough manner, such branches of learning as are related to agriculture and the mechanic arts, and military tactics, without excluding other scientific and classical studies."

This was the charter presented to the first Board of Trustees, by which they were to determine what character this Illinois Industrial University should have. The last part of the name did not mean anything; for were there not already in the State several so-called universities whose names were the biggest part of them? One could find a university as easily as he could an academy or a college, and among the masses there was little distinction between them. Note, too, the Trustees were simply given *power* to do certain things, they were apparently not required to do those things and were not forbidden to do anything unless as some claimed they could not exclude "other scientific and classical studies." This Board of Trustees were not educators professionally. Among the thirty-two members only two had ever had any personal experience in building up or managing an institution of higher learning, and only three more were entitled to write after their names an academic degree. They were mostly men of affairs—farmers, business men, two or three lawyers, one doctor, one pastor of a church, and so on. Like other people these men held widely diverse opinions as to what the new institution could or should be, what purposes it should fill, what methods should be adopted in filling any purpose. There were great anticipations, for the endowment was usually considered large enough for the attainment of wonderful things. Were there not four hundred and eighty thousand acres of land scrip, besides the donation by Champaign county and allied interests themselves aggregating, so it was claimed, about four hundred thousand dollars? The sums looked phenomenally large in those days, but their supposed munificence only stimulated activity in planning what was to be done with the money, and thus further increased the diversity of opinions. At the first meeting of the Trustees, which was held at the newly located seat of the University in May, 1867, it was found necessary to pass an order that no member should speak more than once upon any question without leave, and that no one should speak at one time more than five minutes. This indicates

something of the readiness for debate among the thirty members of the Board present.

But at this same meeting held in the Congregational Church in Champaign, a committee on courses of study and faculty read a report which more than any other one thing settled at the time and for all time the main features of the newly founded University. This report brought together many of the nebulous ideas prevailing at the time, condensed them into well-shaped forms, threw out the unassimilable, arranged them in order, added new elements and put life and action into the whole. The document as examined today is a masterly one, but read in the light of the times when it was written, considered with reference to the conditions existing forty years ago in the educational world, it shows not only keenness of appreciation of the needs to be met at the time, but a prophetic vision of the demands and possibilities of the future. If the Trustees at their first meeting in March, in Springfield, found little or nothing for their guidance in the law, they now had a charter by which to shape their action. Not that all accepted its provisions. There was still much variance of opinion and voluble discussion, but from that day, May 8, 1867, until now, the ideals presented in that paper have been closely followed, wittingly or not, in the developments which now make up the history of the institution. The paper was written and read by Dr. John M. Gregory, the first President, or Regent as he was then called. With him were associated on the committee Newton Bateman, then Superintendent of Public Instruction, Mason Brayman of Springfield, S. S. Hayes of Chicago, and Willard C. Flagg of Moro, near Alton, one of the first college graduates of that time, who saw enough in agriculture to meet the mental activities of an educated man. Dr. Bateman was a graduate of Illinois college and a pupil and friend of Professor Turner. Mr. Flagg was a graduate of Yale.

II. THE CHANGE OF NAME

The extravagant ideas current half a century ago as to what could be accomplished in the way of founding and building a university upon an endowment of a few hundred thousand dollars, as well as upon the subjects of what might be expected from the new education portrayed in visionary addresses by certain theoretical enthusiasts, inevitably led to reaction. The administrative officers of the State and the members of the Legislature could not understand why more funds should be needed to support an institution already so well provided as was this one founded upon the national Land Grant. Slowly and grudgingly it was admitted that building and some equipment must be provided from the State treasury and for these purposes certain appropriations were made by every General Assembly after the founding of the University, but for the payment of professors' salaries, surely the endowment must suffice. Let it also be remembered that

though a definite policy had been adopted by a majority of the Trustees which was never abandoned, there were hundreds of thoughtful people in the State who had been warmly interested in the original project and who still retained their special ideas upon the subject, who were in one way or another greatly dissatisfied with what had been done. It could not have been otherwise whatever had been done. Some of these looked upon the whole cause as a lost one, gave up interest, did nothing; others became open enemies. The newspapers well reflected this condition of things and either ignored the institution altogether or were ever ready with criticisms. The great dailies sneered because there was nothing taught but agriculture; the agricultural press found nothing commendable in the agricultural investigations and instruction. Few people, and among them the editors, really knew anything about what was done or taught and none seemed to care to learn. The name which the founders had bestowed upon the institution, though expressive and honorable in their own minds, proved to be incorrectly interpreted, and this again led to wide misunderstanding of the nature of the institution. The word "industrial" had become associated with charity and penal institutions. There was indeed but one other in the whole country called *industrial*, which did not partake of these latter characteristics. This was and is the Arkansas Industrial University, named directly from our own and on whose campus there exists today a duplicate from the same plans of our University Hall. Well-to-do parents did not want to send their children to an industrial school; those trying to provide for outcasts or criminals found to their surprise that the Industrial University was not organized for their reception. In the early eighties, a county school superintendent of Macon County, almost adjoining ours, wrote, asking if three unruly children of a widowed mother, the oldest thirteen years of age, could be provided for in the Illinois Industrial University. A graduate of the class of 1876, seeking employment, was asked where he was educated, and upon replying, at the Illinois Industrial University, the inquiry followed at once, "What were you sent up for?"

With this state of things, is there much wonder that appropriations from the State came by the hardest efforts, if they were made at all? Is there much wonder that growth was very slow, if any took place? But efforts were made against discouraging odds, in the face of indifference and sometimes of ridicule, with concealed and open enemies at home and abroad, during a depressed period in the financial and commercial affairs of the country. With little forward movement anywhere in any line of activity, the University, nevertheless, did gain from 1880 onward. For the first time in its history State appropriation toward the expenses of general instruction was secured in 1881. The amount was indeed small but the acknowledgment thus made was great. The money only amounted to five thousand seven

hundred dollars per annum for two years; that which went along with it was the practical acceptance by the State of the fact that it possessed an educational institution which it must support. In 1883 the next General Assembly made the sum fourteen thousand dollars per annum for two years—an encouraging increase and an example that has usually been followed ever since. In 1885 came the change of name. Other things seemed now to permit a movement which had been held to be inadvisable before. The term "The State University" had begun to be somewhat commonly applied to the institution. The name Industrial University as usually understood was recognized as a misnomer, though many of the friends of the institution felt reluctant to any change which should imply in any way or to any degree a change in character or purpose. All enemies were at once aroused. The old name suited these to perfection. When it was found that some change was probable, attempts were made under various pretexts to prevent the adoption of the name which was proposed and afterwards applied. The graduates of the earlier classes took the most active part in this name propaganda, the Trustees and Faculty deeming it unwise to be known as urging the change. The "boys" had the influential help of a few interested members of both the Senate and House and in spite of the opposition encountered the movement succeeded.

But the victory, for such it was, thus won in 1885, was due to other activities and agencies than those apparent at the time. One man especially had been carefully making ready for this battle for five years. Not that this change of name was the main object in view, but this was the best outward evidence of an accomplished purpose. The appropriations for current expenses beginning in 1881, and the change of name meant in good part the same thing, or it may be said that the latter expressed what the other really signified, viz, the University of the State of Illinois, so recognized and supported. The man who more than any other is to be credited with this achievement was Selim N. Peabody, LL.D., the second President. Existing documentary evidence does not give anything like proper credit to the work and services of this devoted, conscientious and really able man. This little testimonial is therefore more gladly given in this place.

III. A GOVERNOR'S HELP

During the year of 1892 the Faculty as such fully discussed the needs of the University upon the legislative side, and for the first time in the history of the institution formulated for themselves their conception of these requirements and caused the results to be passed on to the Trustees. Again abundant consideration was given the subject and while the total amount of money talked of was many times beyond anything ever before asked for, the opinion became unanimous that all the items were essential ones and the estimates were reasonable.

The only hesitation felt by some members of the Board of Trustees concerned the matter of policy. Everything in the list was needful to the proper progress of the University. Would so large an asking jeopardize everything? The bill for 1891 carried a total of \$197,300.00, and this included an unusual item, seventy thousand dollars for the Natural History Building. The proposed askings for 1893 made a total of \$345,600 and three new main structures were called for, namely, a library building, one for the College of Engineering and one for a public museum. Claims for the latter were emphasized from the consideration that at the close of the Columbian Exposition, to which the University was to be a large contributor, it would be possible to secure a large amount of valuable material if there could be offered suitable accommodations for it.

While some other members of the Board were strongly in favor of including everything mentioned in the list prepared by the Faculty, no one so unreservedly and enthusiastically advocated this as did Francis M. McKay, an alumnus of the University and for many years an active and influential trustee. This acknowledgment is gladly made though it must not be taken as in any way disparaging others. It is made more especially because of what herein follows.

The State elections in November, 1892, resulted in a Democratic victory, placing the next year John P. Altgeld in the governor's chair and giving political control to the Democrats in both houses of the Legislature. Here, then, was a new proposition to face in regard to University appropriations. From the beginning in 1867 the Republicans had been in continuous power. Would the new masters be equally interested and favorable? Who could tell?

The bill was introduced in the Senate, everything included. Its first reference early in the session was to the committee on appropriations and there it was well supported. But the men had previously agreed on economy. They proposed to make a record for this, now the chance had come to them. The askings were cut unmercifully. The three buildings were thrown out. The expense fund was reduced to the amount passed by the previous General Assembly; everything was blue. The University representatives withdrew, perhaps wiser, but no better men than before. A council was held to determine the next step to take. Some one proposed a call upon the Governor. Colonel Richard P. Morgan was made spokesman. An audience was soon obtained and the Governor listened patiently to the story carefully told and to the plea skillfully made. After many questions and replies, going deep into the merits of the cause, the Governor said, "Well, gentlemen, wait until morning and come in again. I will see the chairman of the Senate committee. Perhaps something can be done." Something was done. The chairman did not report out the action of his committee but instead called the latter together again

the next afternoon. The matter was reconsidered and a report was soon agreed upon recommending the full sums asked for except for the museum and library building. The engineers' building, at one hundred and fifty thousand dollars was put in. The entire complexion of things had been changed over night. From that hour onward the the passage of the amended bill was easy. A new and influential friend had been found in the Governor of the State, and so he subsequently and abundantly proved himself to be. Whatever else and elsewhere may be said of Governor Altgeld, his name should be a luminous one on the pages of the University history and his memory should be cherished for what he was and did in connection with this University of Illinois.





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